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ADDRESS IN GYNECOLOGY.

HOW GYNECOLOGY IS TAUGHT.

Being the Address of the Chairman of the Section on Obstetrics at the Thirty-ninth Annual Meeting of the American Medical Association, May, 1888.

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The Victorian period furnishes no more marked example of the evolution of a great science and a technical art, than the growth of gynecology during a single generation. The Imperial Dictionary says that gynecology is the doctrine of the nature and diseases of women. Brief as is this definition it includes a field too extensive with too many elements of medical and surgical complexity to be defined as a specialty. Every province of Medicine is placed under tribute. Ethics, dialectics, casuistry and sociology contribute to the solution of mental, moral, social, and physical problems in a field where priest and logician claim an equal right with the medical man. The depths to which gynecic surgery may penetrate have not yet been sounded, while operations so desperate that the surgeon is sustained only by his training and the courage of his convictions, are simple matters of routine. Surely this cannot be called a specialty. I would define it as general medicine and surgery brought as near perfection as the age permits; and gives direction by certain mental qualities in the medical man himself.

This brings us to speak of the man and the large element of personal equation that shapes him for his work and in the direction of which he has a certain natural drift, for which he is fitted only by gradually maturing in his calling. How else can he be prepared with the large measure of sympathy and the boundless patience that he must expend in the routine of his daily life; how else can he make himself at one with a moral nature that stands in the order of vital events at the opposite pole of spiritual life to his own? He must be possessed of some innate qualities of truth and consistency in order to deal with a being specially created by God to understand and interpret him. His inner life must be free from guile, and his outer life lived cleanly, that he may gain the confidence of one to whom all goodness, and beauty and truth are sexual traits of mind. He must have a sturdy and manly moral nature that will give repose to those about him, that can lead at all times, and that can govern when he must.

Such is, I believe, the thing called gynecology, and measurably approaching this standard must be the gynecologist. When we take into consideration the fact that this is the growth of but a single generation, the conclusion that gynecology has outgrown the system of medical education as it exists to-day is evident, and further, that it is not the outcome of any existing method of medical training, but the product of the period, and has simply kept pace with the march of events in the intellectual evolution of the age. We can account for the gynecologist in no other way. No college has educated him, no polyclinic has turned out the finished product, but the history of civilization has shown that surely out of human needs has grown the supply of every want. Heretofore he has been an accident, but the necessity having created him, the supply can no longer be left to chance, he must be educated to meet the want.

Here we touch the real difficulty of the question. Has medical education in any existing system perfected itself to meet the needs of the civilization of which it is a part? We may say of any of the special sciences, outside of medicine, that in some centre of learning each may be followed to the ultimate borders of its progress, and what is of equal value, one may there cross the borders, and add to the material facts of his chosen field, but leaving out the pure sciences as they exist in their special forms, we find the applied sciences taught to meet the demand that called them into existence. Steam has created the mechanical engineer, and has perfected schools to educate him. Electricity has produced the electrical engineer and technical schools are able to turn out the finished expert. Scientific warfare has created special schools where the most advanced forms can be practically taught. The same thoroughness of technical education applied to medicine seems to carry the student away from its simple practice to that of the secluded laboratory, or in the direction of the great specialty of the future,—State Medicine, as we

can already see it in the government laboratories of Europe. Each step in advance as it has assumed a form made necessary by the demand of social evolution has enlarged the bounds of practical education, that of the work-shop, the laboratory and the instrument of precision. There is not an exception to this law anywhere in the line of march of material progress.

This is not a national matter, but is cosmopolitan in its breadth; but as America is the country in which the most finished forms of the gynecologist has been produced let us turn to our own standard of medical education, and to our best methods as they exist to-day, and question what are the chances of meeting the requirements of the future? You must remember, that I and my contemporaries in the profession passed through our medical training with scarcely a suspicion that such a thing as gynecology existed. The teacher to whom we looked for instruction in this department held the chair of Obstetrics and the Diseases of Women and Children, and he was expected to do all of this in the short space of sixteen weeks. Why the function of this one man was limited by subjects that he never taught, and that it was impossible for him to teach, was one of the mysteries of the system. Such was the fact, not only in my college, but all over the land, and what is yet more to the point, in not a few instances, it is a fact to-day.

I have been able, by means of some publications of the Illinois State Board of Health, to examine into the teaching methods of our medical colleges. And here let me say, that I know there are a number of distinguished teachers before me, and no one will more willingly accord to them than I the merit that they have so honorably won. It must be understood, then, that I say without disrespect, but also without fear, that the medical teaching of to-day does not as perfectly reflect the actual state of medicine, or as completely meet its needs, as that of twenty-five or thirty years ago. At the time of which I speak, gynecology was obstetrics. There was no separating them, and, indeed, no need; for all that was known of gynecology was practiced through a narrow tube called a speculum, and its surgery varied from the potassa fusa of Simpson to the antiphlogistic touches of Meigs. Now let us see how this important subject, that involves so large a part of the life-work of every medical man, is disposed of in American medical schools. I have selected only those that are accepted by the Illinois Board of Health; nor have I drawn the line at medical sectarianism, for every woman, no matter what may be the particular "pathy" of her medical attendant, has a right to expect that her sexual ills are safe in his hands. I have here a list of 109 medical colleges, so-called, and 56 of them have the diseases of women taught by the Professor of Obstetrics, and 14 of them still retaining under this head the diseases of children. There may be other means of teaching gynecic medicine, but if so no mention is made of the fact in the list of teachers. In 82 there are either professors, lecturers or instructors of gynecology, and as such are given a place in the faculty. In 10 no mention is made of the subject of women's diseases at all. That is, the professor of obstetrics is such only, and no mention is made of his occupying the double chair of the first group. So far as these schools give us any knowledge of their methods, the subject of gynecology has no place in their curriculum. One school that stands by itself in my tabulation mentions that 44 lectures are given upon gynecology. This part of my table gives us 66 colleges out of 109 in which the diseases of women is either taught by the Professor of Obstetrics, or is not taught at all.

This is the old method of work, and like the majority of things that are old has the merit of being respectable to say the least. According to my way of thinking worse remains to be told, worse in the sense that if the new method, the graded system, does not give us something better it implies failure and defeat, and thus the cause of medical education is set back another generation. Now I do not believe that any one will dispute me when I assert that the so-called graded system came from the practicing body of the profession and not from the teaching branch. I have watched and studied this change from its inception and think that I know something about it from the non-teaching side of the question. Years of agitation in this Association, in State and local societies were needed before any practical shape was given to reform, and even then nothing was gained from the teaching branch of the profession. Reform emanated directly from the practicing ranks. The change was not grafted upon an old school, but was given form in a new school with its faculty recruited from the rank and file. This was the college at Syracuse, and the graded method of study forms the sole basis of instruction. The establishment of this school marked the period that was ripe for reform. Fifteen years have passed since, and in this interval but thirteen colleges are organized upon a required basis of graded study. In all other instances it is recommended, but not *required*. The advocates of this reform can find no cause of offense if we stop to critically examine the measure of good that has been the outcome of the method.

And first, I may say for the great mass of the profession, that the new departure was well received. They were pleased to know that the growing demand for higher medical culture was met in a fair spirit, and while a few schools conformed to the demand, it was looked upon as a beginning reformation. Courage and faith in the real depth of the reform spirit in the mass of the profession was needed on the part of those who

embarked in the new system. The commercial enterprise of the majority of the schools was arrayed against it, and disaster was continually predicted for the new movement. So active was the reform spirit that several schools began their chartered existence with the graded system as a part of their organic law, and that without which would have had little reason to exist, but flourished in spite of, or by reason of, a state of nearly open warfare. These few words tell the history of the movement, for here the matter ended. The inertia of the commercial spirit rests upon it, and the old and new have struck hands in a sort of unholy alliance. Not to my knowledge has there been any addition to the ranks of the new schools. Among 109 institutions 13 have the graded plan of study as a required curriculum.

President Andrew D. White, before the Yale College Alumni, reviews in a most caustic address, the defects of our educational, social and intellectual life. All the deficiencies that an American of cosmopolitan culture would be ashamed of, he attributed to a broad undercurrent of retarding influence that he called mercantilism. He did not refer to American medical education as an instance of this overpowering trade spirit, but it asserts its presence as powerfully in the professional training school as in the academy or in the senate. Upon this theory we may explain what happened to the young and promising reform party. It found itself circumscribed as with a rampart by this mercantilism and barely held its place. It did not advance. It is to-day what it was in the beginning, and has become as indifferent to the progressive spirit of the age as the old order of things that it endeavored to replace. There was a fatal mistake made at the very beginning of the reform in regarding it as established, instead of being merely a trial of the new order of things upon its merits—an experiment capable of being extended and improved. At the the time the change in medical education found a few practical adherents, educational methods were receiving great attention, and old ideas were giving place to new upon every side. The reform in medical teaching differed from that in other fields of education in moving at once to some radical changes, and then becoming as fixed in its new direction as it was in the old, while in the latter the subjects as well as the methods of education are debated as earnestly to-day as when the movement began. Matters are yet in a state of evolution, and step by step the questions are being solved. Another singular difference also exists, as I shall show. The new medical curriculum has taken up methods of teaching that advanced educationalists have abandoned; thus, while the text-book is becoming less an instrument of higher education, it has more or less ursurped the place of the didactic lecture in the graded medical school. The result to my mind is serious, and is becoming evident in the fact that reform medical education is taking up the very methods that progressive education is abandoning for demonstration and the didactic lecture. It is a total misconception of the purpose of a text-book to place it before the student as a substitute for the magnetic personality of the living teacher. Now a medical man may be defined as one trained to observe natural phenomena in a certain special field, and he must be trained to observe as accurately the phases of disease as the operation of that uncertain factor called a remedy. I assert, and no one who has been a thorough and original student will contradict me, that the text-book was never written and never so carefully studied, as would transform the untrained man into the accurate observer; but I will go further, and say that just in proportion as he masters his text-book will he narrow his mental horizon and blunt his observing faculties. If it is the purpose of medical education to simply fit a man to pass an examination, a series of memorized facts acquired under the drill of a simple coach—for to that function have many professors degenerated—is as good an education, if not even better, than any other, but while being thus educated the student has been exercising one of the lowest faculties of his intellect, leaving higher and more useful faculties untrained. The dangers of this method do not end here. I say flatly that the text-book cannot educate, but it has entered into branches from which it ought to have been excluded, if the object to be gained was education. For instance, Anatomy and Materia Medica in the new medical curriculum have by nearly common consent been surrendered to text-book teaching. What ought to be a series of object lectures, each fact being materialized and studied in its exact and natural relation, is reduced to a useless memorizing of a mass of disjointed facts that no amount of after training will place at the call of the man in after life when text-books are forgotten. What ought to be entirely laboratory work and lecture demonstration, is taught exclusively in the recitation room.

If you remonstrate with an advocate of this method he will point with pride to the high average of the man's term examination, as though technical education could be represented, like interest, at so much per cent. The teaching of anatomy was crude enough under the old method in the majority of the schools, but it is incomparably worse in those in which the text-book has gained the ascendant. It is extraordinary that small country schools that aspired to take a high rank as thorough teaching bodies did not see the advantage that would result to them of excluding the elementary sciences entirely from the recitation room and making them the subjects of laboratory work. So far for the student. But I believe that the effect upon the teacher is equally bad. A medical teacher, of all men given to that calling,

ought to be a man growing continually deeper in his knowledge, wider in his range of mental vision, and riper and more complete in his method of work. He reaches these progressive levels of development by study and experience in his real specialty, that of teaching. Conceive of the effect upon any ordinary man of sitting before a class of young men, with his book upon his knee, and hearing a mechanical recitation, while he industriously marks his men as they repeat more or less accurately the pages of the author then in the ascendant upon the subject-matter of the professor's topic. Can he develop? Will his character round out in the fullness of time into the perfect teacher who inspires enthusiasm, clarifies the understandings of his students, and contributes his share toward developing that most complete embodiment of the education of the age, the scientific observer?

What retards the growth of the graded system? why is it recommended instead of required in 96 out of 109 colleges? The reason is, I believe, mainly due to the fact that practical educators recognize the insuperable difficulties of joining a system of graded study to a three years course of the numerous subjects that enter into a medical education. In some schools anatomy consumes two years, the freshmen of the second year taking it up where the freshmen of the year before left it off. The same was true of physiology, and yet in this same year clinical medicine and surgery, with therapeutics, had of necessity to be taken up. I know of no school where the elementary sciences were cleanly finished up in the freshman year under the graded system. This is not the place, nor have I the time to give all the reasons necessary to prove my position that the old didactic three years course of study must be abandoned in favor of a four years course of study, in order to perfect a system of graded medical training. Nor has the demand of the profession been satisfied by this imperfect attempt at reform. The growth of the polyclinic, the development of which has been a phenomenal outgrowth of the attempted reform in medical education, is one of the best evidences that the working body of the profession is in search of something better in the way of technical training than is afforded by the medical college. Their existence as teaching bodies independent of the regular schools still further complicates the question, and will in the future add further difficulties in the way of the adjustment of the conflict that exists between the just demands of the body of the profession and what we are compelled to regard as the mercantilism of the schools.

Under this so-called graded system gynecology has fared more poorly than under the old method. In one school dermatology is given a full chair, while gynecology is in charge of an instructor, at the end of everything. Three of the schools have the subject assigned to the second year, while the ten remaining have given it to the third year. It appears as much out of place in one as in the other, if we are to find a place for it among the following third year studies as advertised by one school, namely: Therapeutics, practice, surgery, clinics, obstetrics, pediatrics, gynecology, forensic medicine, ophthalmology, hygiene. This school gravely states in its advertisement that "steady growth and not distension is the result" of the graded system.

Now, under these circumstances, how is gynecology taught? It is simply not taught. The graduate leaves his alma mater with his mind like virgin soil so far as this great branch is concerned. In forming an estimate of what a medical college can do we must take into consideration our own personal bias. We of this Section insist that medical education should tend to make a student a safe and efficient obstetrician and gynecologist, while the ophthalmologist makes the same demand for his Section, and the neurologist for his. Now we must admit that it is not the purpose, nor is it possible, for medical schools to turn out the finished expert in the practical subdivisions. In this sense we must regard the school as a primary department in medicine. It sows the seed, and each one reaps a harvest according to his needs, or the quality of his manhood. If in all the special fields, in which a practical knowledge implies brain culture with manual training, the medical teacher will teach correctly, consuming the time, brief of necessity, that the student can devote to the branch, grounding him in practical education with sound *viva voce* object teaching, and not textbook recitation with a view to passing an examination, the man may be safely left to himself in the field of practice. Teach him to observe and how to examine, and knowledge and expertness will come to him. The man who travels through a strange country with a map and compass does not find depicted every declivity and vale and devious winding of his route. His map gives a series of suggestions, his compass points the way, the landscape is new and strange, yet with trained faculties of observation he safely pursues his way.

We are living to-day under a new dispensation in the matter of teaching gynecology, and that is the influence diffused among us by the womens' hospitals. Starting from the germ planted by our great master Sims in the Woman's Hospital of the State of New York, scarce a city of the land but has its hospital, great or small, public or private, where some faithful master, surrounded by a little band of followers, works and teaches. Each becomes a nucleus from which radiate widely diverging influences, the result of which may be seen in nearly every hamlet of the land. But a few years have witnessed this influence at work among us, and but a few years bear the token of the new art itself, yet the numbers who have re-

ceived their inspiration and teaching from this source may be numbered by thousands. Those who were under the personal influence of Sims realize the full meaning of this. Being in touch with this man has sent a thrill of enthusiasm down far-reaching channels of medical life that has not yet ceased to vibrate. To us the man is a memory, in a few years he will become a tradition, and will pass into the history of a great people and of a beneficent art, while his influence over the thinking and doing of those who come after him in his beloved art is ever growing wider and deeper. Sims was a man of the working ranks. He was the apostle of the general practitioner, he leavened the mass, he diffused through it his superabundant individuality like a subtle essence. To his teaching, his example, and his enthusiasm we owe the position we occupy among the nations as gynecologists.

ORIGINAL ARTICLES.

LIVING AND DEAD OSTEOMAS OF THE NASAL AND ITS ACCESSORY CAVITIES.

ILLUSTRATED BY A CASE OF ENCYSTED ORBITAL OSTEOMA ORIGINATING IN THE ETHMOID BONE.

Read in the Section on Surgery at the Thirty-eighth Annual Meeting of the American Medical Association, May, 1887.

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Spencer Watson called attention in 1868,[1] to the fact that a peculiar form of exostosis not infrequently developed from the walls of the ethmoidal cells and the sinuses of the frontal and ethmoid bones. Frequently these osseous tumors developed into the orbit and encroached upon the eye, displacing and finally destroying it by pressure. It was the practical importance of the latter fact that directed especial attention to the so-called orbital osteomas. Cruveilhier had before this shown that osseous tumors were often encysted or surrounded by a peripheral layer of bone. Virchow pointed out that orbital osteomas often developed in the diploë of the surrounding bones expanding their cortical substance so as to be "encysted," by a layer of the latter, but at the same time he made the distinction between these enostoses and true exostoses originating in the periosteum of the walls of the orbit.

Arnold first called attention to the fact that orbital osteomas often had their primary seat in the surrounding sinuses, and from here later in their growth entered the orbit. The true relation of the encysted osteomas of the orbit, of Cruveilhier, to the nose and accessory cavities, was not thoroughly revealed until 1881, when Bornhaupt,[2] in an excellent article describing an orbital osteoma originated in the frontal sinus and operated upon by Volkmann in Halle, gathered from the literature not less than fifty cases of these tumors. From Bornhaupt's exhaustive investigations on this subject, the most important points regarding the development, as well as the diagnosis, prognosis and treatment, hitherto unknown, have been brought forth; and we owe to him our present somewhat thorough knowledge of the subject, together with most valuable practical suggestions as to the rational method of operating for their removal.

Tillmans[3] has lately called attention to the fact that similar osteomas develop also from the walls of the nasal cavity, and that the dead osteomas described by Dolbeau, lying loose in the frontal sinus, belong to the same class of osseous tumors.

My attention has been especially directed to this subject by the following case:

Morits Mayer, 24 years of age, tailor, was admitted to Cook County Hospital, April 27, 1887. He gives the following history: Parents lived to old age and there is no history of tumors or deformities in any of his ancestors or relatives. Patient had measles when a child, but otherwise has always been strong and healthy. He dates his present illness from 1878, when he was struck by a club at the inner canthus of the right eye, causing fracture of the bones of the nose. In the course of a year a swelling appeared and increased slowly and without pain in the above named region, causing the right eye to be pushed outward. He thinks the swelling has remained stationary for the last eight years. Five years ago a discharge of pus from the right nostril commenced and has continued ever since. Four months ago an abscess formed in the inner canthus. It was opened and left two fistulous openings which discharge a moderate amount of pus.

Present condition.— The patient is well nourished, somewhat pale, but otherwise looks healthy.

On the right side of the root of the nose is a flat prominence which fills up its inner third from the superciliary arch down to the infra-orbital ridge and extends a little in front of the bridge of the nose. The superciliary region of the frontal bone, that is, the anterior wall of the frontal sinus is not enlarged or pushed forward. The skin covering the tumor is normal with the exception of a red inflamed area around the two fistulous openings. The probe introduced through these, finds roughened bone near the surface, and the entire tumor feels hard, as if consisting of bone covered only by skin, The infraorbital margin can be traced to within a line or two in-

[1] Transactions of the Pathological Society of London, 1868, page 314.

[2] Langenbeck, Archiv für klinische Chirurgie, 1881. B. 26, p. 589. Ein Fall von linksseitigem Stirnhöhlen-Osteom, nebst Bemerkungen über die in den Nebenhöhlen der Nasen, sich entwickelnden Osteome.

[3] Ibid. B. 32, Heft 3, page 677. Ueber todte Osteome der Nasen und Stirnhöhlen.

side the infraorbital foramen, where it gives place to the hard tumor arising from below.

The eye is pushed downward and somewhat outward, and on examination by Dr. E. M. Smith, oculist to the Cook County Hospital, presents the following condition: Right eye deviated outward and downward; distance from nasal crest to pupil on left side, 30 mm.; on right side, 50 mm.; consequently the outward deviation is 20 mm.; deviation downward, 10 mm.; exophthalmos, 7 mm. There is slight hypermetropia, the pupil is active, the tension of the eyeball normal. Ophthalmoscopic examination shows the fundus normal, the optic papilla not swollen, but the veins are somewhat engorged and tortuous. Acuteness of vision good.

Inspection of nose shows, an inch and a half inside the nostril, instead of the inferior and superior meatus and the concha, an irregular mass covered with bluish-red mucous membrane, and to which several small polypi the size of a pea are attached.

The infraorbital region is somewhat prominent in its nasal half, but no distinct tumor can be felt behind the upper lip above the alveolar process of the upper maxilla.

Inspection of the mouth and palate shows no difference between the two sides, and the soft palate and pharynx are normal. Rhinoscopic examination is impossible on account of the thickness and size of the soft palate, the movements of which the patient cannot control. Palpation of the nasopharyngeal cavity with the finger reveals a hard, irregular, rough, bony mass filling up the right posterior coana. A small exploratory incision dilating the fistulous opening of the tumor, in the inner canthus, showed the roughened bony surface of a large osseous tumor which was hard and immovable.

Ethmoidal Osteoma.

Diagnosis.—Orbital osteoma originating in and being part of a large ethmoidal osteoma. The place of origin either in the lower medial point of the frontal sinus or in one of the ethmoidal cells.

Operation.—On May 3, 1887, the patient was anæsthetized and an attempt made to introduce a Bellock's tube with a view of tamponing the right cavity of the nose posteriorly and anteriorly, so as to avoid hæmorrhage down into the pharynx. This was frustrated by the tumor in the nose which made the introduction of the tube impossible. The patient was then placed on his back, with his head hanging downward, to be operated upon in Rose's position. A longitudinal incision was made midway between the eye and the root of the nose, commencing on the frontal bone an inch above the orbit and extending downward three inches to the ala of the nose. The incision having been carried down to the tumor, the soft parts were detached by a gouge from the anterior and orbital surface of the latter. The tumor was found to extend far back in the orbit, from an inch to an inch and a half. The surface of the tumor is very hard and the tumor itself immovable. With a view of getting at the base of the tumor, if it existed, or rather, of uncovering the mass of the tumor, I removed with the chisel the nasal and frontal portions of the superior maxilla and the right nasal bone, together with the nasal process of the frontal bone. Having thus opened the frontal sinus I was so fortunate as to find the end of the tumor reaching up, with only a small corner which was not attached to the walls of the frontal sinus at all. Through the large lateral opening into the nasal cavity, the tumor was found filling it up and by grasping with a firm bone forceps, it was easily made movable and brought out through the opening. The bony tumor which was formerly felt in the posterior nares was still there, but it was loose and was removed through the same opening as the other tumor. There was now left a large cavity opening into the frontal sinus and posterior nares, and the nasal and sub-maxillary cavities below. In the orbit, the periosteal covering of its inner wall was intact, covering the eye and its accessory organs. The remainder or the cavity was covered with its mucous membrane, on which several small polypi were found and removed.

There was no considerable hæmorrhage and the wound was united and the cavity washed and packed with iodoform gauze. With the exception of a slight rise in temperature on the second day, the course of the after-treatment was aseptic. The iodoform gauze dressing remained until the close of the second week, at which time the wound had united.

Description of Tumor.—The living osteoma weighs two ounces, measures 2½ inches in length and 1½ inches in diameter; it is irregular in shape, since it consists of several portions, corresponding

to the different cavities which it occupied. These portions, separated by distinct depressions from the central body of the mass, are: 1. The orbital portion which forms a rather square mass of bone, measures 1½ inches from above downwards, 1½ inches in antero-posterior, and ¾ inch in transverse diameter. Its anterior ridge is denuded and roughened, while the rest of the tumor is covered with periosteum and a thick layer of mucous membrane. The orbital portion reaches from the internal anterior border of the orbit back to the orbital foramen. From the upper inner corner of the orbital portion a small round projection the size of a pea extends up into the frontal sinus. 2. The portion occupying the antrum of Highmore is a rounded pyramid ½ inch broad ¼ inch high, and occupies the cavity mentioned, the nasal wall of which has disappeared. 3. The nasal portion, which forms the bulk of the osteoma is an irregular square of the above mentioned diameter in all directions; its inner surface is covered with a thick layer of mucous membrane, from which three mucous polypi the size of a pea have grown out. At the anterior upper corner of this nasal portion is a large polypous growth ½ inch long, ¼ inch broad, pedunculated. It contains a small bony nucleus the size of a pea; in other words forms a small osteoma, by means of a pedicle movable against the large tumor, in which there is a small depression into which it partially fits. The posterior inferior surface of the nasal portion is concave, 1 inch in diameter, covered with a thick layer of smooth connective tissue. The concave surface forms a cup into which the upper rounded surface of the dead osteoma, so to speak, articulates. On the middle of the inner surface of the nasal portion is found a square plate of the ethmoid bone ½ inch in diameter, which I consider the point of origin of the osteoma.

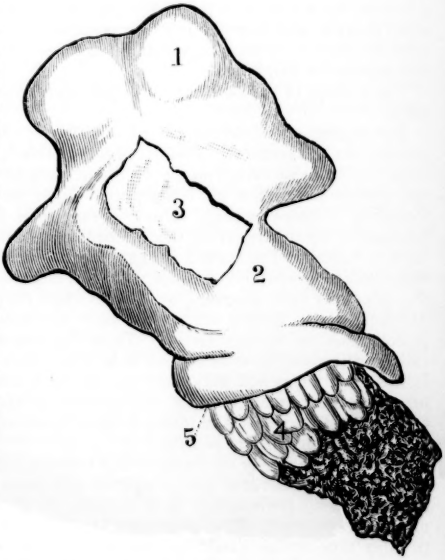
The cut surface of this large osteoma shows a peripheral layer ¼ inch in thickness, of extremely hard, compact osseous substance; so hard that a sharp chisel or knife will only with difficulty cut into it, and a smaller central area of cancellous substance, which is so friable as to be penetrated with considerable ease with sharp instruments.

Microscopic examination of the layer of soft tissue covering the tumor shows the following: A layer of cylindrical epithelium, under which is a heavy layer of mucous membrane proper containing numerous tubular mucous glands. Finally, nearest to the bone, a layer of fibrous tissue constituting the periosteum.

The dead osteoma is about 1½ inches long, ¾ to 1 inch in diameter. Its upper surface, which has articulated in the above described cavity in the large tumor is rounded, slightly nodular, smooth and hard, like ivory. The rest of the surface is uneven and roughened. Parts of the tumor had been broken off, so that when the whole tumor was put together it would form a large mass of the size of a walnut. The broken surface shows this to consist of a very thin outer shell of very hard compact bone substance, and within a mass of fine spongy substance, resembling pumice stone.

On the dead osteoma there is nowhere a trace of any membrane covering it and it emits a penetrating fetid odor. No odor at all emanates from the living osteoma.

Etiology and Mode of Origin.—Bornhaupt has found in the literature 23 cases of osteomas in the frontal sinuses, 12 cases of osteomas in the ethmoidal cells, 10 cases of osteomas in the antrum of Highmore, and 5 cases of osteomas in the sphenoidal cavity or sinus. In all 59 cases of encapsulated orbital osteomas. These seem to be more common than the orbital exostoses, of which the literature furnished him only 7 cases. This class of tumor is more prevalent in youth, 54 per cent. occurring before the age of puberty, 87 per cent. before the 30th year; that is, before the final or finished development of the accessory cavities of the nose. It is thus likely that they owe their origin to some disturbance in the development of these cavities.



1. Orbital portion of the living ethmoidal osteoma.
2. Nasal portion of the living ethmoidal osteoma.
3. Lamina of ethmoid bone from which the living osteoma originated.
4. Dead nasal osteoma.
5. Cavity in ethmoidal osteoma in which the nasal osteoma articulates.

A traumatic cause has been noted in 6 of Bornhaupt's and in the present case. Considering the general frequency of traumatism in this region, it

is very unlikely that it plays any part in the etiology of these tumors.

Whether the tumors originate in aberrating islands of cartilage of the primordial cranium or in an embryonal matrix of the periosteum of the membranous cranium, is as yet an open question. The chief argument against the origin from cartilage is, that no partly cartilaginous osteoma has ever been found in or around this region. It is therefore more probable that they develop from the periosteum on the walls of the cavities mentioned.

Pathological Anatomy.—The tumors consist of a mass of bone with a covering of periosteum and mucous membrane.

a.—The osseous mass of the tumor has the following characteristics: The shape of the tumor originally is round. When it enlarges and extends into the orbits or any other adjoining cavity the form becomes modified. At the place where the tumor passes through the wall or opening into the cavity, a contraction or neck forms, on the distal side of which, as if further growth was not now restricted, a roundish, more voluminous portion develops. Thus in the specimen here presented we easily recognize an orbital portion with a depression or neck separated from the larger nasal portion, and at its outer lower point of union with the former, a maxillary portion extends into the antrum of Highmore.

The surface of the osteoma is irregularly nodulated.

The tumors are extremely hard, like ivory, especially on the surface. Thus it is impossible to chisel into or cut away pieces of them. On the cut surface we find a hard peripheral layer surrounding a more spongy center. Sometimes a laminated arrangement of the peripheral hard layer is found. The central spongy area has been described as resembling pumice stone. Whenever the osteomas have a pedicle or base as when they develop in the frontal sinus, as a rule the base is composed of spongy tissue. Thus the tumor can be successfully attacked at this place only. It has often happened that while the operator has been engaged unsuccessfully in chiseling at the body of the tumor it has suddenly become loosened by the breaking of the pedicle.

b.—The Covering of the Tumor.—All encapsulated osteomas are covered with a layer of soft tissue, namely, first, periosteum, and outside of this mucous membrane. The latter contains the usual tubular muciferous glands of the nasal mucous membrane, and is covered with cylindrical or fimbriated epithelium. This layer of mucous membrane is sometimes (as in the specimens here presented) thickened and covered with mucous polypous growths.

Invasion of neighboring cavities takes place where the osteoma has grown too large for the cavity in which it originated. The orbit is most commonly invaded as its walls participate in the formation of the ethmoidal, frontal and maxillary sinuses. The growing osteoma presses upon the bony wall of the orbit, which at the place of contact atrophies and disappears, and the osteoma with its covering of mucous membrane enters the orbit. If the tumor enters from the frontal sinus the eye is pushed downwards and outwards; if the ethmoidal sinus is the point of origin the eye-ball is dislodged outwards. Finally, if the tumor originates in the antrum of Highmore, the displacement will be in an outward and upward direction.

As soon as the orbit is opened, and in consequence, the mucous membrane covering the osteoma comes in contact with the connective tissue spaces of the orbital periosteum or the orbital connective tissue, an abscess forms. The microbes present on the surface and in the mucous glands of the mucous membrane invade the lymph spaces of the affected tissue and, necessarily, traumatic infection resulting in suppuration takes place. Thus an abscess forms near the inner canthus of the eye. In older cases we find one or more fistulous openings leading down to the surface of the orbital portion of the osteoma.

Far more serious in its consequences is the invasion of the cranial cavity by osteomas developed in the frontal or sphenoidal sinuses. The suppuration first between the dura mater and the cranium, later on perforating the dura mater, terminates the patient's life by suppurative leptomeningitis, or abscess of the brain.

Bornhaupt found that of 17 cases of osteoma of the frontal sinuses, in 11 cases, or 65 per cent., opening into the cranial cavity had taken place.

Symptoms.—In the beginning the symptoms are not characteristic as the osteomas grow very slowly, are painless and cause no inflammation as long as they stay in the cavity in which they originate. Enlargement of the wall of the cavity is often found, and next we find a hard, painless tumor in the inner canthus of the eye.

Displacement of the eye-ball is often the first symptom that calls attention to the existence of a tumor.

By filling up the sinus in which it develops and occluding its outlet accumulation of mucous or catarrhal fluid takes place, with subsequent distension followed by the symptoms characteristic of this condition. Finally the abscess forms under the conditions described above.

Diagnosis.—An extremely hard, painless tumor of slow growth, at the inner wall of the orbit, accompanied by abscess and fistulous openings resulting therefrom, makes the diagnosis of encysted osteoma reasonably easy. A very important point to ascertain now is the place of origin of the tumor. As above stated, the deviation of the eye-ball gives us the most important information in this direction. If the eye is pushed down-

ward and outwards, we may expect an osteoma of the frontal sinus; if directly outward the tumor comes from the ethmoidal cells; if upwards and outwards, from the antrum of Highmore.

Prognosis.—The prognosis depends upon the seat of origin of the tumor. Osteomas of the frontal sinuses must be considered as very dangerous. The mortality after the operation has been, according to Bornhaupt, 64 per cent. Of 11 cases, 7 died from meningitis, or abscess of the brain.

Osteoma of the sphenoidal sinus has been operated upon only once by Ferguson. The patient died from collapse shortly after the operation. Other tumors of this variety have not been observed in living patients, but found on specimens in museums.

In the case of osteomas developed away from the cranial cavity the prognosis is entirely different. The ethmoidal, nasal, and supra-maxillary osteomas are not dangerous and can be removed with safety. Out of 12 cases of ethmoidal osteomas, 11 were cured by operation, 1 by spontaneous exfoliation.

Osteomas of the antrum of Highmore give also a good prognosis for extirpation for the same reason as that given for the ethmoidal tumors, namely, the absence of injury to the cranial cavity.

Treatment.—The encysted osteomas have no connection with syphilis, and consequently are not amenable to internal medical treatment. Surgical treatment alone comes into question, that is, extirpation of the tumor. Considering the anatomy of the encysted osteomas, as above described, the plan for operating is obvious. We must expose the tumor by removal of its encysting bony walls, find its base or pedicle, and divide the latter, in order to free the tumor. The extreme hardness of the body of the tumor makes any attempt at removal piecemeal by hammer and chisel almost impossible. Knapp worked five hours on a tumor of the frontal sinus and was able to remove only a small piece. He was obliged to abandon the operation and the patient died from meningitis seven weeks later. Maissonneuve, in trying to chisel off a prominent nodule of an orbital osteoma originating in the ethmoidal cells, found such a degree of hardness that he had to work for a long time with all the different bone instruments with which Charrière, who was present, could furnish him, before he succeeded in removing even a nodule of the tumor.

If we then cannot attack the tumor from its surface, we must lay it open, expose it by removing with the chisel the bones that cover it, the anterior wall of the frontal sinus, nasal and maxillary bones. When the tumor is exposed we look for its base or pedicle. Knapp has pointed out that this part of the osteoma is often composed of soft, spongy bone tissue, so that the chisel may be used here with advantage. In operating upon ethmoidal osteomas it makes no difference whether the base is hard or soft, because the fine, thin plates of the ethmoidal bone, from which the tumor has grown out, break off and fall out with the tumor with almost the first stroke of the hammer. The specimen here presented shows a plate of the ethmoid bone adherent to the tumor.

The removal of the osteomas from the frontal sinus is more difficult, not so much because the plates of the frontal bone are stronger than the thin ethmoidal plates, but because we dare not break off the cerebral plate of the frontal sinus for fear of meningitis. We must try to divide the pedicle with the chisel without employing much force, and rather leave part of the osteoma than open the cranial cavity (v. Oettingin and Birkett). But even if the most careful manipulation of the instruments is observed, as in Socin's operation described by Banga, in which the tumor, to the astonishment of all present, became loose by almost the first touch of the hammer, the cranial cavity may be opened with disastrous result.

This often unavoidable danger in operating in the frontal sinus induced Mackenzie and Berlin to advise enucleation of the compressed, inflamed, doomed eye, instead of the radical extirpation of the tumor. However unsatisfactory this remedy seems from a surgical standpoint, it deserves earnest consideration, inasmuch as the osteomas are benignant tumors of slow growth and may in course of time separate spontaneously from their point of origin.

Spontaneous loosening of the encapsulated osteomas takes place not infrequently. Beside the small loose or dead osteomas found accidentally in frontal sinuses, of which Tillmans reports 6 cases, we find a case described by Middlemore, who tried to remove an orbital osteoma, but gave up the operation. Nine months later the tumor became loose and was extracted. A similar case is reported by Imre, cited by Tillmans. An orbital osteoma the size of a fist had pushed the eye down to the angle of the mouth. After 43 years duration it became loose spontaneously, and the eye returned to almost its normal place in the orbit. Hilton saw a large osteoma of the antrum of Highmore which had destroyed the eye, become loose after 17 years, during suppuration.

Tillmans reports a case in which he removed by operation two loose dead osteomas of the frontal sinuses and an osteoma of the nasal cavity. He points out that osteomas of the nasal cavity have been as yet very seldom reported. Habermaas saw a case in v. Brun's Klinik. The tumor had originated in the ethmoid bone, with a pedicle the size of a thumb. It was successfully removed by operation. He remarks that the so-called nasal stones or concrements have sometimes been found to contain a nucleus of bone. This fact makes it probable that dead osteomas of the nasal cavity

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are more common than has been hitherto believed.

The cause of the spontaneous loosening and death of the osteomas is as yet not satisfactorily settled. Suppuration is generally conceded to be one of the causes.

OBSTINATE HÆMATURIA.

Read in the Section on Practical Medicine, at the Thirty-ninth Annual Meeting of the American Medical Association, May, 1888.

BY H. D. DIDAMA, M.D.,
OF SYRACUSE, N. Y.

Bloody urine is common enough. As is well known, the blood may come from lesions of the urethra—lesions sometimes produced by over-cutting strictures—lesions then so painful and persistent that the last estate of the victim is much worse than the first.

The blood may have its origin in the bladder, from fragile veins or papillomata or, as in one case which I saw, from an enormously enlarged prostate, on the raw surface of which a large, rough, concave calculus sat like a crown of thorns.

The bleeding may start in the ureter or pelvis of the kidney, from the cutting of sharp gravel. Or, as in the exanthems and especially after them, it may come, tawny and thoroughly mixed with the urine from the tubules.

It is usually practicable and not very difficult to determine the origin of the hæmorrhage. The flow, often transitory, may be recurrent with intervals whose uncertain length may or may not be the result of treatment.

Every practitioner is familiar with these varieties. He knows the established medication. From the infusion of agrimony or yarrow, recommended more than a hundred years ago by the pious John Wesley, in his "Primitive Physic," to the gallic acid and ergot of modern times, the number of remedies brought forward is almost unlimited. Indeed the excessive richness of the pharmacopœia in urinary hæmostatics, instead of being satisfactory, is absolutely embarrassing—not to say suspicious.

In most of these ordinary cases recovery takes place from the healing influence of time, with or without the help, or hindrance, of drugs.

But hæmaturia is not always mild and tractable. Occasionally, but rarely, cases occur which are extremely perplexing and obstinate.

The *indicatio causalis* furnishes no aid in the treatment, for the cause often eludes the most thorough scrutiny. Attacks on the disease itself, however intelligent, unremitting and persistent, not infrequently end in utter and mortifying discomfiture.

I give the briefest outline of five cases of obstinate, chronic hæmaturia, the only ones that have come under my observation and treatment. Under the care of eminent physicians, for periods from a few weeks to three months, four of these cases had the best treatment commended by authorities and devised by ingenuity. The treatment in each case was an entire failure. Yet under the use of the remedy to be mentioned in this paper, recovery took place within a period of nine days in four of my five cases, and in the fifth within three weeks.

Case 1.—Mrs. J., a strong, industrious housekeeper, some 40 years of age, had been annoyed with bloody urine for more than six weeks. All bodily functions were normal. She did not know the cause of the hæmaturia. She suffered no pain during nor after micturition, but she was considerably weakened by the constant loss of blood. She had derived no benefit from the numerous domestic remedies which kind friends had recommended.

In one week after commencing the use of the remedy, presently to be described, the hæmorrhage entirely ceased and never returned.

Case 2.—L. F. C., aged about 35, Supervisor of Tompkins County, of light build, but wiry, and fond of all wood, field and stream sports, had been under the care of several bright physicians of Ithaca and elsewhere for more than a month. His urine was never free from blood. The various drugs employed very faithfully never influenced, even temporarily, the amount of the hæmorrhage. After commencing the treatment, which I am purposely withholding in order to sharpen your attention, the bleeding stopped suddenly on the eighth day and never returned. Mr. C. attributed the hæmorrhage to taking cold while gunning.

He died two or three years subsequently of anthrax.

Case 3.—Rev. Dr. N., of New York, 50 years of age, had been under the care of his personal friends, the deservedly eminent Dr. Jared L., and Dr. Alonzo C. The origin of the hæmorrhage was not satisfactorily determined, but from some slight pain in the back the suspicion was entertained that the offending factor was a calculus in the pelvis of the left kidney.

It is not necessary to state that the treatment of their distinguished patient was the best that great wisdom, extensive reading, and a half-century's active practice could furnish.

But the hæmaturia was not controlled in the slightest. At last the reverend gentleman was advised to relinquish his work, travel in Europe and drink the light wines of that country. At this time he had become so weak that he could not leave his house.

But in less than one week after commencing with the remedy, which will not much longer remain unrevealed, the hæmorrhage suddenly and entirely ceased. The trip to Europe was indefinitely postponed. The arduous labors of the good pastor were soon resumed and continued for nearly twenty years. But the hæmorrhage never once returned.

Case 4.—Mrs. W., of Rochester, a lovely woman of 35 years, and good constitution, had an attack of hæmaturia in the spring of 1885. Her physicians, Dr. E. and his partner, both enthusiastic and determined, and eminent among the many distinguished medical men of that charming city, after three months of faithful treatment, advised her to go to New York to consult the great and good Dr. F., and the distinguished gynecologist, Dr. E. They provided her with a letter in which they stated that they had employed every astringent in the whole pharmacopœia without the slightest effect either good or bad. They had washed out the bladder with styptics and all other ancient and modern applications, but the blood had always appeared in the usual quantity at the very first urination after the irrigations. There was no diminution in the amount of blood during or after the administration of any and every remedy employed. An exclusive milk diet produced no effect. Confinement to the house, and even to a horizontal position, never lessened the amount of the hæmorrhage. Neither did free indulgence in all kinds of food and in all the exercise of which in her debilitated state she was capable increase the amount of blood voided. Only at the monthly period—which was free from pain—was the hæmorrhage from the bladder increased.

At the solicitation of friends, and with the hopeless assent of the patient, I visited her at her summer home in 'Sconset. I found her exsanguined. I made as thorough an examination as was practicable. The amount of urine was normal, but it was thoroughly mixed with dark blood, some of which after a time settled in a diffuse, soft clot to the bottom of the vessel. The history of the case and the discovery of tenderness on careful manipulation led to the conclusion that the hæmorrhage arose, in part at least, from the right ureter and pelvis. Examination of the epithelia some weeks afterward seemed to verify this diagnosis.

I related my limited experience and offered to prescribe, but made no promises. The patient, more from politeness than from faith, consented to permit one more attempt in her behalf. Treatment was commenced as soon as medicines could be procured. The remedies were taken faithfully but, as in the other cases, no improvement took place for a week. Indeed, as this was the menstrual period, the amount of blood in the urine actually increased.

The husband now appeared on the scene. I had gone home from my vacation. After consulting with the excellent local physician, Mr. W. decided to go at once to New York, whither he ought to have gone at first. On the eighth day after beginning with the new remedies, the still extremely pale, but somewhat stronger, invalid went by rail and steamer a day's journey to the metropolis, arriving too late in the evening to consult the eminent practitioners. She was much fatigued, but she noticed an improved condition of the urine. The next morning, for the first time in four months, the urine was entirely free from bloody stain. The New York physicians were not consulted. A return of the hæmorrhage occurred the next summer, but it was soon controlled by the new treatment. Since then there has been no recurrence.

Case 5.—The last case was M., aged 30, laborer, Syracuse. Summer of 1887. No pain, no tenderness, hæmorrhage abundant. Bladder had been washed out and he had taken, under the care of Prof. H., a graduate of Syracuse College of Medicine, moderate doses of the remedy I am anxious to divulge. But the treatment was changed after a little and a cure was not effected. After several weeks of non success, the case came under my observation and was subjected to considerably larger doses of the remedy than I had found necessary in any former case. And even under this management, the hæmorrhage lasted nearly three weeks, with occasional intermissions; when it ceased entirely and has not again returned.

The treatment consists in the administration of 60 grains of alum in the course of twenty-four hours.

In most of the cases this was given in three 20-grain doses dissolved in a goblet of water.

In Mrs. W.'s case the alum was administered every three hours in 8-grain doses, dissolved in half a glass of water. In her case also, on account of the extreme anæmia, 8 minims each of tincture of chloride of iron, dialysed iron and dilute phosphoric acid were given in water after each meal.

In M.'s case the dose of alum was increased to 10 grains every three hours.

Unlike most astringents, alum, in these large doses, does not constipate the bowels. This is doubtless owing to the fact that being *largely* diluted with water it passes readily into the blood and through the urinary passages. This dilution is very important and should not be neglected. Nausea has not been produced in any case.

I am aware of the ready criticisms which the learned and cautious physicians present will naturally make, and I admit their full force. *Post hoc* is not necessarily *propter hoc*. One swallow does not make a summer, nor satisfy a summer thirst. But *post* may be—and often is—*propter*. And then a whole flock of swallows may be regarded as a pretty safe harbinger of a warm season.

I admit that my aviary of *post hoc* birds is still too limited to be very significant. But these are all I have. I have been many years capturing them. They have a family resemblance. And, somehow, do they not really seem to have a very *propter* kind of look?

A NEW YORK JURY recommends that druggists shall not be allowed to sell rat poison except upon the prescription of a physician.

A NEW METHOD OF INCISION OF THE INTESTINE.

Read in the Section on Surgery, at the Thirty-ninth Annual Meeting of the American Medical Association, May, 1888.

BY H. H. MUDD, M.D.,
OF ST. LOUIS, MO.

Enterectomy, or the resection of a portion of the intestine, is regarded as such a tedious and prolonged procedure that many operators hesitate to undertake it in cases in which it is the ideal and desirable operation.

Prolonged exposure of the abdominal viscera and much manipulation of the intestines, adds so much to the shock and also to the danger of exciting peritonitis, that the time and manipulation required by the ordinary methods of excision often render impossible the attempt to thus restore the natural channel.

The tedious and time-taking steps in the operative methods commonly used, have consisted:

Firstly, In the great number of interrupted Lembert or Czerny-Lembert sutures used—twenty or thirty being the approximate number.

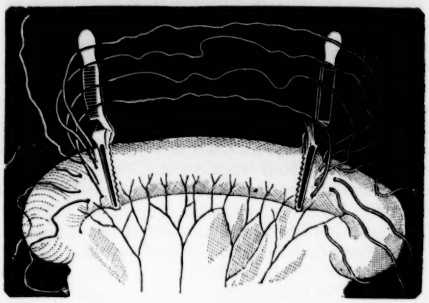
Secondly, In the difficulty of placing accurately the sutures at an even distance from the serous margin of the excised border. This margin is concealed and overlapped by the everted mucous membrane; the cut edge is soft, pliable, and hard to manage while placing the sutures.

Thirdly, There is difficulty in finding an instrument to compress the bowel so as to prevent the escape of fæcal matter without injuring its delicate structure, and at the same time not impede the movements of the operator. The fingers of an assistant are the best, but these tire when so many sutures are to be placed, and the hands of an assistant are in the way of the operator.

I shall not attempt to compare the various operative methods pursued in the resection of the intestine, nor yet attempt to discuss fully the merits of the method which I submit to you for your consideration. The method I have followed obviates some of these delays and difficulties; hence, I venture to submit it to you for your criticism and for trial. The value of any such procedure depends somewhat upon the operator and his familiarity with it, and its general utility can only be attested by the experience of the various surgeons to whom it may commend itself.

The method I have followed during the past few years is one that I first tried March 16, 1886, when called upon to excise a portion of gangrenous intestine for hernia, and as it answered well, I have continued its use in such cases as have demanded resection at my hands, as also in some experimental work.

The method is as follows: The loop of the bowel being made free and easy of access, two pairs of forceps are placed upon it, marking the lines at which the excision is to be made. Seven or eight presection interrupted Lembert sutures are to be placed before the portion of the bowel to be removed is excised. The outer borders of the forceps serve as an accurate guide for their insertion. A common cambric needle, threaded with a long piece of fine silk, is used to place these interrupted sutures. See cut No. 1.



They are quickly placed, for the intestine is firmly held by the Péan catch forceps or the preputial forceps, which are used as clamps. The needle is entered about three-eights of an inch from distal side of one pair of the forceps, passed through the serous and muscular coat into the sub-mucous, making its exit about an eight of an inch from the line of the forceps, after traversing nearly one-fourth of an inch of the intestinal wall. The needle is then carried across the space between the forceps and enters the intestinal wall one-eight of an inch from the proximal side of the other pair of forceps, and traverses the wall of the intestine, as before described. The thread of the suture thus placed should be long, so as not only to leave a free loop between the two ends of the bowel, but also to give the free ends which are necessary to ease and security in managing and tying the sutures. Two of these sutures, seven in number, should be so placed as to have one on each side of the mesentery; another at the free margin and two intervening sutures on each side of the bowel, dividing equally the space between the free and mesenteric borders. These sutures should be left with long threads and not tied until after the excision is made.

The mesentery should now be secured, by including it, when not more than two or three inches of the intestine is removed, in a single ligature which should be placed parallel to not more than half an inch from the mesenteric border of the intestine. The section of the mesentery is made between the ligature and the border of the gut. The portion of the mesentery included should be fully equal to the intestine excised.

The section of the intestine is now to be made. Before making the section, the bowel at the proximal and distal side is emptied of its contents and held by an assistant with his fingers. The opera-

tor now slips a finger on each side of the portion to be removed, but under the loops of the sutures, and carries these loops first to the distal and then to the proximal side of the two pairs of forceps. The scissors are introduced between the suture loops and the bowel. The section of the bowel is made first at the distal side and then at the proximal end. The bowel and the forceps are removed together.

The line of the Lembert sutures, when thus placed, is even and regular. These presection approximation sutures are tightened as soon as the portion to be excised is removed, and the divided ends cleansed. A continuous suture of fine catgut carried about the bowel, approximates more perfectly the surface of the serous membrane, and closes any gap that may be left between the interrupted sutures. (See cut No. 2.) The seven interrupted sutures thus placed are quickly and readily tied after the section is made. The continuous suture is easily applied and does not necessarily invert any more of the bowel. The time occupied in such an operation ought not to be more than fifteen or twenty-five minutes, after the bowel is exposed and makes possible an enterectomy when the older methods are not permissible, for the time occupied need not exceed that necessary for the production of an artificial anus.

The advantages believed to be possessed by this method of operation, are:

1. The manipulation of the portions of the intestine which are to be united is reduced to a minimum.

2. All tissue which has been included in the grip of the compression forceps is removed.

3. The line of the forceps gives an accurate and perfect guide for the placing of the sutures, and makes certain the section and the reunion of the bowel at right angles to its axis.

4. The rapidity with which the interrupted Lembert sutures can be placed is very much greater then where the attempt is made to put them in position after dividing the bowel, and the divided ends are not long exposed; hence, it is more nearly the ideal aseptic operation.

5. The union of the divided ends is accurate and sufficiently firm to retain fluid matter. This is accomplished with a few—seven or eight—interrupted silk sutures and a continuous catgut suture placed in or near the same line as that occupied by the interrupted sutures. This continuous catgut suture extends around the circumference of the bowel, reinforcing and sealing the Lembert sutures.

6. The eversion of the mucous membrane is controlled and fæcal extravasation prevented.

7. The time necessary to complete the operation is much shortened, because (a) the clamps give easy and perfect control of the suture line; (b) a limited number of interrupted sutures are used; (c) the continuous catgut suture is quickly and easily placed; (d) there is no delay in pushing out of the way the everted mucous membrane which so much delays the placing of the interrupted sutures.

The difficulty of securing the serous margin and holding quietly the edge that is to be approximated can be appreciated only by those who have made the effort.

The only stumbling block in the way of a rapid and satisfactory operation is the management of the long threads of the presection Lembert sutures after placing them, and while making the section of the bowel. This is easily overcome by placing them on a folded towel and by slipping the fingers under the central portion of the loops on each side of the bowel, and carrying the loops back with the fingers beyond the forceps, over the healthy intestine, previous to making the section. The interrupted and the continuous sutures should be carried well down into the wall of the bowel, so as to include the sub-mucous tissue.

The Péan catch forceps answer well for the clamps. I have, in the human subject, had a successful case where a free evacuation of the bowel followed the operation within twenty-four (24) hours, and occurred daily thereafter. Post-mortem examination after thus excising gangrenous intestine, the result of strangulated hernia, has uniformally demonstrated good union and no leakage at the intestinal wound.

This method of excision was in part described by me in July, 1887, at the meeting of the Mississippi Valley Medical Association, held at Crab Orchard Springs, Kentucky.

THE DEATH is announced of the first female medical practitioner who settled in the important Siberian city of Tobolsk, where she had entire charge of the female department of the city hospital and lunatic asylum. She lectured also at the School of Midwifery and had a considerable private practice. In addition to her multifarious duties she found time to pursue scientific investigations. She is stated to have habitually worked sixteen hours a day.

TREATMENT OF STRICTURES OF THE MALE URETHRA BY ELECTROLYSIS.

BY J. D. THOMAS, M.D.,
OF PITTSBURG, PA.
PROFESSOR OF GENITO-URINARY AND VENEREAL DISEASES, WESTERN PENNSYLVANIA MEDICAL COLLEGE.

Some two years ago I became enthusiastic with regard to the treatment of strictures of the male urethra by electrolysis, and this enthusiasm was engendered by the glowing reports of cures from such treatment in some of our medical journals, and by various contributors, but notable among these were Newman, of New York, and Belfield, of Chicago.

I am now satisfied that it was the enthusiasm of the moment that led me astray, for if I had analyzed the cases reported with that candor that a medical man should always exercise I would have evinced some skepticism before beginning my work. As it was I went at the task with the enthusiasm of a devoted lover. The outcome of my devotion I lay before you to-day.

To perform the work I invested in the most approved appliances, for I believed from what I had read that dilatation, divulsion, internal and external urethrotomy were to be relegated to the dead past, so far as they were to be of any further utility in the treatment of strictures, and that all that was necessary in these cases to effect a cure was to pass the electrodes. But permit me to give you the facts from experience and the results of electrolysis as epitomized from my case-book.

Case.—S. K. M. presented himself on November 30, 1887, with the history of having contracted a gonorrhœa sixteen years before. The discharge continued for one year, then ceased for a time, but to again return. The discharge has so intermitted up to the present time. Examination of the urine shows an accompanying cystitis. He has been treated by many doctors and in many ways. On exploring the urethra I find several strictures, the deepest one at 5½ inches from the meatus, admitting No. 11 French bulbous bougie. The patient did not attend with that regularity which he should, but by March 11 (a little over three months) I had succeeded in dilating his strictures up to 24 F., his normal calibre being 32 F., but the strictures were resilient and resisted any further dilatation. You will readily appreciate that the patient was now in a good condition for internal urethrotomy and a speedy cure.

At this time, however, the patient became ill with an intercurrent trouble, and did not again present himself until April 15, a little over a month since last treatment, and on reëxamination I found that the urethra would now only admit a No. 20 F.

I by this time had received my electrolytic armamentarium, and went to work on this patient —a most excellent one for the test—with the greatest assurance. My notes of the case run as follows:

April 15, 1887. Passed No. 20 F. electrode (negative pole), occupying ten minutes, and using three cells.

April 22. No bad results from last treatment. Passed No. 22 F. by electrolysis, using six cells during the séance, and occupying fifteen minutes.

May 14. Nothing larger than No. 22 F. would pass.

May 26. Failed to pass No. 24 F. through first stricture, with a gradual increase of cells up to nine. No. 22 F. passed, but with more difficulty than on the previous occasion

June 4. Patient presented himself with an inflammation of the urethra anterior to the first stricture (which was ¾-inch from meatus) so severe in character that the lips of the meatus had a tendency to agglutinate.

My patient never returned. I had spent two months in the treatment by electrolysis, and my patient was worse off than when I discontinued treatment by gradual dilatation. In this case the electricity was administered carefully—increased cell by cell—and at no time did the patient complain of much burning or pain from the current. I gradually went up to nine cells because a less number produced no impression upon the strictures—there was no absorption. All the directions, to the letter, were carried out as laid down by the advocates of the method.

I was very much chagrined with the result in the above case. Not being entirely daunted, however, I went on with the work. To not burden you with the particulars I will simply state that I afterwards treated several cases, some with strictures of large calibre, others with strictures of small calibre, and gave each patient about two months' treatment, but not one of them derived any benefit from the treatment, and were afterwards cured by orthodox methods.

By analyzing Dr. Newman's "Synopsis of the Second Hundred Cases of Stricture of the Urethra Treated by Electrolysis," as reported in vol. ix, No. 13, of THE JOURNAL, we find that out of the whole number, when discharged, only *three* had their strictures enlarged to more than No. 30 F., whilst some were discharged with their urethræ admitting only a No. 14 F. The calibre of ordinary urethræ being of the dimensions of a No. 31 F., it is quite an imposition upon the credulity of the profession to state that such patients were, as we are led to believe, cured. Out of one hundred cases some few would surely have urethræ whose normal calibre would admit a No. 40 F., but the three cases mentioned were only enlarged to No. 32 F.; and further, when treatment began the strictures of these three were large ones, ranging from 21 F. to 25 F.

Twenty out of the hundred were never seen after treatment was discontinued.

Twenty-four only were reëxamined, and but *nine* of these after the lapse of two years from last treatment.

The remainder, we are told, "were well," and we are to accept the assertion, I presume, on faith. I can recall patients who were treated eight years ago by gradual dilatation, and they say to-day that they are well, and they will continue to so say until enough recontraction has taken place to interfere with the urinary function. But I would not be justified in saying that they are well—cured.

It is taught, and I believe such teaching is correct, that a case of stricture of the urethra is not cured until the normal calibre of the urethra is established throughout its entire extent. On examining critically the cases of Dr. Newman referred to in this paper not one of them, according to my standard, was cured.

If we take up the cases of the other reporters who claim so much for electrolysis and analyze them, we come to the same conclusion that we do in Dr. Newman's cases.

Now, the point may be raised that my failure of success with electrolysis was due to a want, upon my part, of the correct appliances; also that I was lacking in *technique* and dexterity in the manipulation of urethral instruments. The first point cannot be maintained, for I secured the most approved apparatus. As to the other objections I have no reply to make. But this I do know, and from personal interviews with some of them, that the most expert genito-urinary surgeons and those having world-wide reputations, like myself have failed, after honest work, in deriving any good results from electrolysis in the treatment of urethral strictures.

After candid consideration and a fair amount of experience, I firmly believe that these reporters, and to be charitable with them, are laboring under a delusion, and what success they claim as being derived from electrolysis is secured purely by the dilating effect of their bougies. It will be observed that the most of their cases are only enlarged up to from 20 F. to 28 F., the amount of improvement that is ordinarily secured without much trouble by gradual dilatation. We know that strictures frequently, after being dilated up to a certain point, cease to dilate any further, when urethrotomy becomes necessary. Now, it will be observed, further, that the cases treated by electrolysis are only dilated up to a certain point; none are dilated completely.

Among the hundred cases herein referred to are some in which it is stated that, after a filiform had failed to pass in other hands, an electrode bougie went through on the first attempt. That proves nothing, for the urethral canal is a very unreliable one, owing to its proneness to spasm, as all know who have had some experience. During the early part of this year I introduced a No. 18 F. sound into a certain urethra without much trouble. Four days afterwards I could not introduce even a filiform. Upon the second attempt the surroundings were different, and the obstruction was purely spasmodic in its nature.

If electrolysis, in the treatment of urethral strictures, is "a delusion and a snare," I hope this paper will bring out the experience of those who can speak *ex cathedra* upon the subject, and if the consensus of opinions confirms my own, I then am glad that I have added my feeble effort to assist in pricking the bubble.

THE USE OF LACTIC ACID IN CHRONIC SUPPURATIVE OTITIS.

Read before the Medical Society of the District of Columbia, March 7, 1888.

BY ISIDOR BERMANN, M.D.,
OF WASHINGTON, D. C.

Among the most troublesome and dangerous affections of the middle-ear we daily meet with, chronic suppuration must be mentioned as requiring our most energetic efforts towards effecting a cure. It is not only the unpleasantness of the mostly offensive discharge, although this is usually the cause of the patient's applying to us, but the actual danger of metastasis, that even when the discharge is flowing freely, always exists, which calls on us to use every means in our power not only to stop the discharge, but also to remove the cause of it. The danger is owing principally to the retention of smaller or larger quantities of pus in the cells of the mastoid process and it is very frequently, especially when the opening in the drum is not large, impossible to remove every particle of pus by syringing. This accumulation gets inspissated in the adjoining cells of the mastoid process and can remain there for years without doing apparently any harm, even while the ear, as far as can be seen by ocular inspection, is kept perfectly clear by syringing or instillations.

It is needless to mention here the different indications and various methods that have been recommended and are constantly in use for these troubles. No doubt a great many of them, as most of us have experienced, especially if the cases come early enough into our hands, are quite effective in arresting the discharge, and we frequently see perforations of the tympanum heal up under their application. It is not to such cases I am alluding to-night, but to those that have resisted every effort of medication and persist in a steady malodorous discharge of a muco-purulent nature. They usually go hand in hand with somewhat larger perforations, and although the hearing may not have suffered to any great extent, give rise to the most unpleasant symptoms.

It must be taken for granted that the cause for this incessant suppuration lies in an affection of

the bone, although usually one can neither see it, nor feel any carious bone with the probe. The specimens of necrotic portions of the middle and internal ear that have been expelled after years of suffering, which even the most skillful medical attention could not allay, are not often seen, and only rarely have we the good fortune to admire the *vis medicatrix naturæ*, when the patient brings some day a piece of bone to us which he has found after syringing the ear. The majority of such cases end fatally, unless operated on in time.

During my visit in Europe my attention was called to the use of lactic acid in chronic suppurative otitis media, and after my return I resolved to apply it in the first case in which it would be indicated. I did so, and was very agreeably surprised at the rapidity with which I was able to arrest the discharge. It was a case of very long standing, where both ears were affected and where everything possible under the sun had been applied, but in vain. In that first case, as I was not sufficiently acquainted with the effects of such applications, I made the patient come every day, and instilled the diluted lactic acid into both ears, leaving it there from ten to twenty minutes. The offensive odor disappeared completely after the first four days, not to return, and in the course of six weeks every trace of the discharge was gone, and as the drum showed an inclination to heal up, I accelerated this by applications of lapis mitigatus in substance. I afterwards directed the patient how to use the acid at home.

I have not the intention of taking up your valuable time by giving you a complete history of the cases that I have treated with lactic acid. Be it sufficient if I describe the way I found most effective, and assure you that if you will give it a trial in cases where it is indicated you will have every reason to be as satisfied with the results as I was.

On account of the acid macerating the epidermis with which it comes in contact and producing a very unpleasant soreness of the ear, if nothing worse, it is important to protect the meatus auditorius externus from such contact. After trying oil, vaseline, cocoa butter and other fatty compounds in vain, I found that by covering the meatus auditorius externus with a thin lining of paraffine I was enabled to leave even a 30 to 40 per cent. solution twenty minutes in the ear without producing the slightest irritation. It is well to begin with weak solutions and observe how the patients stand them. If the effect is satisfactory one can then go on gradually to stronger solutions of the acid which can be applied, if the patient is intelligent enough, by himself, and must be left at least twenty minutes in the ear. The paraffine must not have too low a melting point, the ear not being very sensitive to moderate heat, and can be applied with a camel's hair brush, care being taken that all those parts of the outer ear with which the acid comes in contact be well protected. After the discharge is stopped it is not necessary to go on with the lactic acid, but keep the patient under observation, and insufflate boracic acid, finely powdered, from time to time. If the drum shows no inclination to heal up it will usually be found necessary, as well for protection as for improvement of the hearing, to insert artificial drums. Some patients' ears stand them very well and their hearing is much improved by wearing them; others resent a foreign body like that very energetically and respond very quickly with acute inflammation and intense painfulness. In such cases I have found that a layer of boracic acid, finely powdered, applied in such a way that it forms a somewhat thicker kind of artificial drum, is not only stood very well but also improves the hearing to quite a considerable degree.

[A few weeks before this paper appears I saw a lady who had been provided with such a layer of boracic acid to act as artificial drum, about six months ago, and found the boracic acid powder still in place, with a ring of wax developed around it and holding it in position.]

USE OF ANTIPYRIN AND ANTIFEBRIN FOR HEADACHES.

BY J. M. G. CARTER, M.D., SC.D., PH.D.,
OF WAUKEGAN, ILL.

For some time now I have been using antipyrin and antifebrin in nervous headaches. My attention was first called to the use of antipyrin in these cases by Prof. Walter S. Haines, M.D. I have found a few cases of sick headache that would yield to this remedy, but generally in persons of nervous temperament. My cases have all been non-febrile. The remedy is prescribed in 5-grain doses every hour until the headache ceases. Often one powder is sufficient, and rarely are more than two or three required.

I have been told that antipyrin has none of its depressing effect upon the heart in non-febrile cases. Such is not my observation. In frail nervous patients, especially in delicate females of nervous temperament, I find that antipyrin does disturb the heart's action, even in 3-gr. and 5-gr. doses. This effect of antipyrin followed notwithstanding the good effect of relieving the headache. To obviate this difficulty was a desirable point to gain and, remembering that there has not been so much complaint against antifebrin, in its disturbance of the heart, as against antipyrin, I determined to try its use. I was much pleased to find that, in cases where the antipyrin cannot be borne, the antifebrin acts admirably. I give the antifebrin in 3-gr. or 5-gr. doses every hour until the headache ceases. Reference to the following five patients will illustrate the varied action of these drugs:

Case 1.—Mrs. A. Delicate health, occasional prostrating nervous headaches, lasting two or three days. Suffers much from neuralgia. Both antipyrin and antifebrin in full doses relieve the headache, but even a single dose of 5 grs. of antipyrin produces distress in the region of the heart, and makes its beat irregular. Antifebrin produces no such feeling.

Case 2.—Mrs. B. Delicate health, but stronger than the preceding. Persistent nervous headaches of two or three days' duration often. Relieved by both remedies. No trouble felt from either.

Case 3. Mrs. C. Has good health; never sick except with nervous headache, which is hereditary and lasts two or three days. No heart trouble from either remedy. Antifebrin makes no perceptible impression. Antipyrin gives almost instant relief. This is the first remedy this lady has found that would diminish her suffering. Nervo-sanguine temperament.

Case 4.—Mrs. D. Usually good health, but often suffers with intense nervous headaches, lasting from twelve to forty-eight hours. Antifebrin produces no beneficial effect. Antipyrin gives relief. Like the preceding, nervo-sanguine temperament. All these patients have borne children.

Case 5.—Miss E. Sister of the preceding patient and of the same temperament. Is somewhat rheumatic, sometimes having slight muscular rheumatism, especially intercostal rheumatism. Often suffers with excruciating nervous headache. Has never used antipyrin. Antifebrin acts quickly.

The return of the headache in none of these cases can be traced to the menses, and they have no regular periodicity.

LAPAROTOMY FOR THE REMOVAL OF A FIBRO-MYOMA.

Read before the Medical Society of the District of Columbia, March 21, 1888.

BY P. J. MURPHY, M.D.,
OF WASHINGTON, D. C.

Nellie B., white, single, æt. 26, was admitted to the Columbia Hospital for Women November 11, 1887. Previous to the summer of 1886 she had good health. At that time noticed a swelling in right side which gradually increased and troubled her a great deal. Menses have recurred regularly, lasting from four to seven days, without pain. At time of admission complained of being restless at night, of frequent smothering sensations and severe headaches. No trouble in voiding urine. Appetite and general condition good. Examination November 12 revealed a hard pear-shaped tumor of about the size of a head of a child 2 years old, extending from the brim of the pelvis upward nearly to the umbilicus, and freely movable laterally. By vagino-abdominal examination the uterus seemed to be slightly connected with the growth; cervix uteri somewhat shortened and soft. Diagnosis of a fibro-cyst of the uterus was made. Menstruated November 19 to 28; flow profuse but not alarming. On December 1 was examined under ether and the growth was found to be freely movable in every direction except upward, and now quite reached the umbilicus. Body of uterus seemed to be displaced forward and to the right side and somewhat enlarged and hard. Some glairy mucus in cervical canal.

At a consultation of the Advisory Board of the hospital December 3 no definite conclusion was reached. From December 28 to February 22 electricity was applied daily (except during menstruation), about ten cells of a McIntosh galvanic battery being used, which gave as strong a current as the patient could bear without pain or too rigid contraction of abdominal muscles. Although the battery was faithfully tried the growth gradually increased, and at the time when electric treatment was suspended it reached a point about 2 inches above the umbilicus. Patient was discouraged with electricity and requested that the growth be removed by operation. At a second consultation of the Advisory Board February 29 it was decided to operate. Laparotomy was performed in the presence of Drs. Morgan and Head, of the Advisory Board, Dr. Linthicum, of Maryland, who formerly attended the patient, and Drs. Boyce and Sweetman, of house staff. An incision about 5 inches long was made in the median line midway between the umbilicus and symphysis pubis. When the growth was reached a number of large blood-vessels were seen upon its surface. It now seemed to be a continuation of uterus upwards, no line of junction being noticeable. A few smaller but harder growths were attached near the vaginal roof; one of which had probably been mistaken for the displaced uterus. Some of the gentlemen present felt the growth and thought that its contents were fluid. A trocar was inserted, but no fluid escaped. The incision was extended 2 inches upward to allow extraction of the tumor. When drawn out of the cavity it was found to embrace the uterus on every side, and its removal was agreed to.

MEDICAL PROGRESS.

METHYLENE AS AN ANÆSTHETIC.—DR. WM. H. DAY says that it is a mystery to him that an anæsthetic so safe and effectual as methylene should not have been more generally employed by the profession. A few deaths have been imputed to it, it is true, and occasional deaths will occur from any anæsthetic, however carefully administered, but notwithstanding, I think, methylene occupies in point of safety a first-class position. Some years ago the late Mr. Peter Squire asked me whether I considered methylene pos-

sessed any advantages over chloroform, and I replied in the following words, which will be found in his *Companion to the British Pharmacopœia*: "It is less likely to cause vomiting, it is more agreeable to inhale, and there is less excitement preparatory to the state of anæsthesia; rarely more than 3 or 4 drachms are required for an operation lasting half an hour, and consciousness returns in a few seconds after inhalation is discontinued." My conviction of these merits remains unshaken.

In abdominal tumors of long standing, with a large quantity of peritoneal fluid, the diaphragm is pressed upwards, and the lower lobes of the lungs are so compressed that very little breathing space is left, and hence the danger of suffocation if the anæsthetic is not given sparingly and slowly. Slow administration is in itself a safeguard. In such cases the shoulders of the patient require to be well elevated, and the mask of the apparatus not brought so near the mouth as to exclude the free admission of atmospheric air into the lungs. In these cases of pulmonary oppression the patient may become livid after a few inhalations, and be seized with a convulsive, choking cough, which embarrasses the operator, but as the ascitic fluid escapes, and the tumor is removed, freer respiration is established, and then the remedy can be pushed to full narcotism, more particularly when the abdominal distension is of recent date. It is in disregard of this warning that fatal consequences may result. When the abdomen is distended with 15 or 16 quarts of fluid, and contains a multilocular cyst weighing 8 or 9 lbs. in addition, the umbilicus may reach a higher level than the nose of the patient as she lies on the operating table. In such a case slow and cautious administration is demanded, and as I have said, some of the fluid must be withdrawn before the patient can take a full inspiration. At this stage we cannot push the methylene beyond partial anæsthesia.

When mucus accumulates in the mouth, I am in the habit of twisting one end of a pocket-handkerchief round the forefinger of the right hand, and wiping it away. This simple practice prevents the mucus from collecting at the back of the pharynx, whilst it facilitates respiration, and prevents the choking cough.

When the pulmonary organs have been long pressed upon, or the heart displaced, bronchial irritation sometimes comes on a few days after operation, as the lungs undergo expansion, and the pressure is removed. This is all the more likely if a considerable quantity of the anæsthetic has been administered. Such complications are rare in recent abdominal distension, but in old standing cases, where the lower ribs are bulged outwards like a fan, this risk is frequent and ought to be calculated upon. In these cases the heart becomes weak; it is often displaced upwards, and prone to take on degenerative change.

As to the existence of a cardiac murmur, undue importance may be attached to it. It is not always easy to diagnose a functional from an organic murmur, but where the pulmonary circulation is free, I never hesitate to recommend methylene as an anæsthetic. The pressure resulting from a large abdominal tumor may give rise to a soft cardiac murmur, which means nothing at all, if the muscular structure of the heart is vigorous enough to overcome any distension of its cavities, but we must not overlook the fact that long-standing upward pressure tends to invite feebleness of the heart's action, thin walls, and degenerative changes. Sudden death at the time of operation, or soon after it, has to be reckoned with.

I have safely given bichloride of methylene to patients suffering from heart disease on many occasions; in dilatation and weakness of the organ, and in mitral change with hypertrophy. When there has been considerable distension of the right and left cavities of the heart from valvular defects I have never hesitated to use methylene if an operation has been urgent, even if the cardiac trouble has considerably impaired the pulmonary circulation. I am doubtful whether there is any other anæsthetic to supersede methylene in this condition. I have ascertained, before commencing the administration, that the heart was weak, or its valves damaged, and yet, in spite of this, the pulse has frequently improved in quality, to the surprise of bystanders, and the patient has looked a far better color at the close of a tedious operation than at the commencement. The bichloride has acted as a cardiac stimulant throughout. Exceptions are sometimes met with, and in these cases I invariably resort to brandy during the administration, never pushing the methylene to such an extent as to interfere with swallowing. I have given, during a long and desperate operation, as much as 6 ozs. of brandy, and I am convinced that this precautionary measure has carried the patient safely through. I never trouble myself about the pulse; the countenance and the respiration are my guides. No hard-and-fast lines can be drawn. One patient can be sent into tranquil sleep with 3 drachms for half an hour, and a very exceptional case will require three times the quantity. Twelve drachms is the largest quantity I have ever given for an operation lasting one hour, and I have no remembrance of Sir Spencer Wells being a longer time than this over his worst operations.

I have known many cases of pleuritic effusion in ovarian disease, and when recent and serous I have advised the abdominal section before tapping the thorax, and in every such case where there has been enough breathing space left I have not been anxious. The effused fluid has disappeared from the chest without operative interference.

I have administered methylene with the best effects in cases of advanced phthisis with a large

cavity in one lung, and softening going on in the other. I do not think I have overestimated the value of methylene, as in 1,230 cases I have not met with anything to alarm me. It is the most harmless of anæsthetics; it has never disappointed me, and I feel sure that those who will give it a fair trial will record a similar experience to my own.

It is not in healthy individuals that danger is to be apprehended from the employment of an anæsthetic. It is in the diseased and feeble, who have been reduced by pain, sleepless nights, and long suffering. In such cases as these Dr. Frederic Hewitt advocates the anhydrous ethylic ether, or the A. C. E. mixture.—*Brit. Med. Journal*, July 14, 1888.

A Case of Cancer of the Larynx; Considerations on Laryngectomy.—At the meeting of the French Society of Otology and Laryngology, Dr. Charazan reported an interesting case of cancer of the larynx. The patient, æt. 60, presented October 1, 1887, the following state: nothing of syphilis, general state of health excellent, easy respiration, cough and expectoration absent; strong-smelling breath, but not fetid. Aphonia present during eighteen months. On examination with the laryngoscopic mirror he found congestion of the epiglottis and of the left side of the larynx; the ordinary symptoms, in fact, of chronic laryngitis. To the right, at the level of the vocal cord, could be seen a grayish ulceration tolerably deep, occupying the centre of a tumefaction which closed the half of the glottis.

Dr. Charazan diagnosticated the case as cancer of the larynx. The progress of the disease, in spite of energetic antisyphilitic treatment, confirmed this diagnosis, and on February 19, 1888, tracheotomy became necessary to prevent asphyxia. Extirpation of the larynx was proposed but was not accepted by the patient.

Touching this case Dr. Charazan compares the results obtained by palliative tracheotomy to those given by extirpation of the larynx in the cancer. At first tracheotomy appears preferable, as it enables the patient to live six or eight months longer, whereas in extirpation of the larynx two-thirds of the patients succumb to the operation or to a rapid recurrence of the disease. But if the statistics are so unfavorable it depends (according to the author) on the fact that surgeons have not always paid sufficient attention to the indications furnished by the state of the patient and by the nature of the disease. All cases of cancer of the larynx should not be operated on. Extirpation should be performed only in the case of cancer chiefly limited to the interior of the vocal organ, while the general condition of the patient is yet good, and when the glands are not yet involved.

Partial extirpation gives better results than those furnished by complete laryngectomy, whence the necessity of early diagnosis, easy to make in many cases. If these considerations are borne in mind the number of successes obtained by extirpation will doubtless go on increasing.—*Revue Mensuelle de Laryngologie*, June 1, 1888.

Effects of Wet and Dry Packing.—Dr. Gritsai, of St. Petersburg, has prosecuted a series of observations on the effects of wet and dry packs followed by vigorous rubbing on a number of healthy hospital attendants. The number of cardiac contractions fell slightly after the application of both kinds of packs—generally speaking, to the extent of six beats per minute after the wet and three beats per minute after the dry packs. The blood pressure, taken by Basch's sphygmomanometer, rose on the average 8 millimetres after the wet packs, and fell 5 millimetres after the dry ones. The inspiratory and expiratory force, taken by Waldenburg's pneumatometer, increased nearly twice as much with the wet as with the dry packs. The muscular force increased after the wet packs, and very slightly decreased after the dry ones. The temperature in the rectum and in the axilla diminished; the rectal temperature was the more affected by the dry pack, falling 0.15° C. after the wet pack, and after the dry 0.27° C. The temperature in the axilla, on the other hand, was the more affected by the wet pack, which caused it to fall 0.18° C., while the dry pack only caused a fall of 0.07° C. The surface temperature, taken by Immisch's thermometer, fell in both classes of experiment; *e.g.*, that of the chest fell 0.48° and that of the thigh 0.6° C. after wet packing, the dry pack producing a smaller fall in both cases—viz.: 0.24° on the chest and 0.2° on the thigh.—*The Lancet*, July 21, 1888.

Methylal and its Use in Delirium Tremens.—Dr. B. W. Richardson states that methylal is not really a new drug, because he introduced it himself in 1868. Its medicinal qualities are: 1. It is hypnotic and antispasmodic. 2. Its action lies between ethylic alcohol and ethylic ether. 3. It can be administered by inhalation, by hypodermic injection, and by the mouth in aqueous solution. 4. It reduces arterial tension, and by local action excites glandular activity. 5. The sleep it induces is not profound unless the dose be excessive. It is quickly eliminated, and leaves no serious effects. It causes no vomiting nor stomachic disturbance. 6. It combines with ether, alcohol, amyl nitrite, and many other remedies, with which it acts in concert, while it equalizes their action by reason of its own solubility. 7. It promises to yield a safe and effective anæsthetic mixture in combination with ether. As a therapeutic agent, the author has often prescribed methylal in doses of one to four drachms in the treatment of spasmodic and painful affections, such as asthma, angina pectoris, colic, and tetanus.

Recently methylal has been brought forward as a substitute for alcohol in the treatment of delirium tremens. In this way it is used hypodermically, and is said to act favorably as an anodyne and hypnotic. This drug, if required perfectly pure, is very expensive; that generally sold in the market at a low price is very inferior in quality, and contains acetone in free quantities, and the results obtained from its use are very different from those Dr. Richardson observed in his experiments.—*Asclepiad*, May, 1888.

IODOFORM IN HÆMOPTYSIS.—The difficulty of finding any successful method of checking hæmoptysis in tuberculous cases has led to the trial of many remedies. MM. Chauvin and Jorissenne, of Liège, publish a short account of the results of the administration of iodoform, at first along with tannin, afterwards by itself. In the first six cases pills were given containing iodoform ¾ gr. and tannin 1½ gr. Sometimes the hæmoptysis stopped after two of these had been taken; in one severe case of advanced phthisis as many as five were given *per diem* for three days before the bleeding ceased. In another patient, who had been in the habit of having eight or or ten attacks of hæmoptysis in the year, which had been treated by large amounts of ergotine and morphine, three of the iodoform and tannin pills stopped the hæmoptysis four months ago; and there has been no recurrence since. In the three cases recorded in detail, in which the iodoform alone was used, the results were very similar. The authors came to the conclusion that gr. ij. of iodoform *per diem* in three pills was an appropriate dose for moderately severe cases, and that more than eight or nine pills was not required in any case they had to deal with. This action they consider quicker than that of ergotine and therefore more useful. In all the cases during the past year in which they have given it there has been no relapse, and during the treatment no disturbance of digestion.—*Progrès Méd.*, May 19, 1888.—*Practitioner*, July, 1888.

ARTIFICIAL GLYCOSURIA PRODUCED BY THE SALICYLATES.—It is well known that the urine of patients under full doses of salicylic acid or the salicylates will often exhibit the reaction for sugar by Böttger's, Trommer's and other tests, but until recently the reducing agent was thought to be salicylic acid or one of the products of its decomposition. It has lately been shown that such urine will ferment with yeast, losing several degrees of specific gravity, and that the presence of sugar and its amount can be shown by accurate quantitative methods. Burton (*Lancet*) recently examined the urines of twelve persons who were taking large doses of salicylic acid, sodium or phenol salicylate, and invariably found sugar present, though often in very small amounts—the largest being gr. vj to the ℥j. The glycosuria, which is temporary, he surmises results through the action of salicylic acid on the diabetic centre, and that the benefit obtained by its administration in some cases of diabetes may be due to the opposite action of small and large doses.—*The Polyclinic*, July, 1888.

THE TREATMENT OF CHRONIC DIARRHŒA BY TALC.—The means at present employed in the treatment of chronic diarrhœas are as inadequate as they are numerous. DR. DEBOVE administered talc, in an impalpable powder, as being inert and not liable to undergo changes in contact with the intestinal secretions. He has given it in doses of seven to twenty ounces daily mixed with milk. In cases of diarrhœa due to tuberculous lesions of the intestines the treatment was uniformly successful, the diarrhœa being followed by an obstinate constipation. Curiously enough, he found that while giving the powdered talc patients tolerated substances which before they had been quite unable to retain. Milk, for example, which invariably gave rise to drastic purging, was given without setting up any disagreeable feelings. He has even been able to give a pound of oil within the twenty-four hours, and thus materially contribute to the nutrition of the patient. So far he has not tried the remedy in the diarrhœa of hot climates nor in children.—*The London Medical Recorder*, July 20, 1888.

THE OPERATIVE TREATMENT OF PRIAPISM.—DR. VORSTER, of Berlin, reports two cases of priapism relieved by operative interference. In the first case the patient suffered from nervous symptoms following a hæmorrhage (hæmophilia). The priapism followed a difficult fæcal evacuation. The symptoms persisted for days, giving rise to atrophic paraphimosis (Rose). Incision of the preputium penis here relieved symptoms. In the second case a traumatism of the urethra with hæmatoma resulted from the kick of a horse. Here the blood tumor compressing the corpus cavernosum penis, and preventing venous return, favored the persistence of priapism. External urethrotomy, incision of the blood tumor (projecting into the lumen of the urethra), and emptying the hæmatoma of clots, relieved symptoms.—*Zeitschr. f. Chir.*, Bd. 27, Hft. 1 and 2. *Annals of Surgery*, July, 1888.

ANTISEPTIC SOAP.—PROF. AUGUSTE NEVERDIN recommends the following formula for the manufacture of a reliable antiseptic soap: Sweet oil of almonds, 72 parts: soda lye, 24 parts; potash lye, 12 parts; sulpho-carbolate of zinc, 2 parts; essential oil of roses, 9.5 parts.

IN CILIARY BLEPHARITIS, DR. GILLET DE GRANDMONT uses a preparation containing 1 per cent. of the iodo-chloride of mercury in pure vaseline. Apply morning and evening.

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SATURDAY, AUGUST 11, 1888.

THE TARIFF ON INSTRUMENTS, BOOKS, AND DRUGS.

The New York Neurological Society has refused to indorse the resolution of the Georgia Medical Society requesting the removal of the tariff on medical books, surgical instruments, and drugs. As the Neurological Society contains a large number of believers in tariff reduction, their action must have been dictated by the best interests of the profession. It is easy to see on what grounds they opposed this resolution, originally offered as a piece of buncombe merely. While a tax remains on the raw material the removal of the tariff on instruments discriminates against the American instrument-maker, and must ultimately raise the price of instruments. Furthermore, under existing circumstances, a surgeon who desires an instrument can have it made by a maker at his door. If the tariff on instruments be swept away without removing the tariff on raw material, the instrument-maker's trade is destroyed, and the surgeon must import his instruments. The fact that the members of the New York Society are greater importers of books and instruments than those of the Georgia Medical Society, renders their action peculiarly significant.—*Medical Standard.*

As off-setting this action of the New York Neurological Society, the Medical Society of the County of New York passed resolutions urging upon Congress the repeal of the import duty on medicines, medical and surgical appliances, and everything used in the treatment and diagnosis of disease. Attention was called to this action of the Medical Society of the County of New York in THE JOURNAL of April 7, though the *Medical Standard* seems to have found it convenient to overlook what the larger and more important Society, composed of general practitioners as well as specialists, has done. While the *Standard* claims that it is easy to see on what grounds the Neurological Society opposed the resolution of the Georgia State Medical Society, it, however, has failed to see what is so visible. The N. Y. Neurological Society took the ground, when it refused to endorse the resolutions of the Georgia Society, that the charges against native instrument-makers were too intemperate and sweeping. The Neurological Society said nothing about "discrimination against the American instrument-maker." Nor did the Neurological Society advance the entirely original and very unique opinion that the removal of the tariff on instruments would "ultimately raise the price of instruments."

When the *Medical Standard* says that the resolutions of the Georgia Medical Society were "originally offered as a piece of buncombe merely," it offers a gratuitous, unmerited, and entirely uncalled for insult to a scientific body of gentlemen whose time and lives are being spent in the interests of humanity. As medical men what have we to do with the instrument-makers' trade as compared with the health, comfort, and lives of sick people? Admitting that the members of the Neurological Society import more books and instruments than those of the Georgia Medical Society, do they import more than the members of the New York County Medical Society? Again, if the action of the Neurological Society "must have been dictated by the best interests of the profession," why did the members reject that portion of the resolutions referring to books and drugs, because the charges against instrument-makers were too intemperate and sweeping? Instrument-makers do not import drugs and books.

In this connection we beg to call attention to the following, from the *Medical Record* of July 28: In a speech on tariff reform delivered by Hon. Ashbel P. Fitch, of New York, a letter was read from a New York pathologist, in which he said, among other things: "For my microscope I sent to Jena, where are made the best instruments for

my work. At the factory it cost $94; to get it out of the custom-house 40 per cent. more. Later I sent for an oil immersion lens, and paid $80 at the factory, 40 per cent. more at the custom-house. Hermann Katsch, of Berlin, makes an instrument called a microtome, for cutting infinitely thin sections or shavings from the surface of a piece of an organ of the body, hardened in alcohol. Herr Katsch is the only man in the world who makes this particular variety of the instrument. To prepare a section thin enough for careful study under the high powers of the microscope this mechanism is necessary. To get this microtome from the custom-house I had to wait two weeks and pay a duty of 40 per cent. on its factory price. The celebrated Dr. Koch, of Berlin, published a report of the cholera commission, conducted under the auspices of the Government. At most, twenty men in this country could require this work, and they must needs pay 25 per cent. duty to get it from the custom-house after paying its publisher's price and freight.[1] What use could this report be to these scientists? To aid them in maturing methods of recognizing the disease when it appeared on shipboard in our harbors; to devise means to suppress it; to protect the country. It was to the expert work of one such scientist that the city of New York must give its gratitude that a certain steamship just developing cholera among its steerage passengers was detained at quarantine and the city escaped overwhelming infection. For Koch's report he paid 25 per cent. duty, and never received anything from the city or Government. When we look up from our laboratory tables, microscopes, microtomes, and alcohol—taxed to suffocation—and read in the papers of the United States Treasury filled to suffocation, we reflect that our scientific work takes much time, brings no money return, increases our outgoes, and has not even the encouragement of the Government nor laity."

THE TREATMENT BY EXCISION OF MASSES OF SCROFULOUS GLANDS.

While scrofulous glands do not, as a rule, attain a large size, and generally suppurate within reasonable limits as to dimensions, discharging externally either spontaneously or from surgical interference, they occasionally continue to grow, become the seats of deposits, infect one another, and gradually increase in size until they form large masses, of a pound or more in weight. These large masses interfere with the circulation, and by pressure on the trachea sometimes also with respiration. When left to nature these cases tend to a fatal termination, and the only method of dealing with them satisfactorily, says MR. WM. KNIGHT TREVES, or with benefit to the patient, is by excision. "For many years," he says, "I left such cases alone, trying for months, and even years, every drug treatment that has ever been recommended, without in any instance, witnessing a favorable result. In fact, anyone who has seen a number of these glands after they have heen excised and cut open will readily appreciate the futility of drugs in such cases."

In the *Lancet* of July 21, Mr. Treves records 9 cases of enlarged and indurated glands treated by excision, and with good results in all the cases. Some of the cases had been going on for six, seven, or eight years, and had attained considerable size. Since there is a uniform want of success in the treatment of such enlarged glands by any other than surgical measures, is it not best that glandular swellings be treated as any other tumors or morbid growths, and be excised or scooped if found to be not amenable to other treatment within a reasonable time? A large proportion of these glands, and perhaps all of them in a given case are found to contain masses of caseated material; these masses are extravascular, are thrown out from the tissues, and are no more likely to be affected by drugs than a loose sequestrum, says Mr. Treves. He has tried the plan of excising such portions as were softening, and scooping out the contents, but this plan was found to be no better than the expectant one, and entailed a number of openings, a number of suppurating cavities that could not readily contract and heal on account of their surroundings and condition. It has been found, too, that after excising and scooping some of the glands, others that have not previously softened gradually break down, the cellular tissue inflames and becomes brawny, hectic continues, and the patient may die, worn out by the chronic blood-poisoning or from pulmonary or other complications.

For enlargements of moderate size scooping with good drainage may answer very well, but not for the cases of very large glands. Limited scooping

[1] Amounting in all to $11.00.—Editor THE JOURNAL.

may be combined with excision in some cases, as when after excising a mass, a broken-down gland may be found deeply and immovably fixed; this may be advantageously scooped. The large masses generally extend into the deeper parts of the neck, lying under the sterno-mastoid and on the deep vessels. In many cases the capsules of these glands are dense and tough, they lie deeply among the vessels, and to incise them for the purpose of scooping without previously exposing them by dissection is a more dangerous procedure than to remove them. The deep glands seldom approach the surface by suppuration. When left alone the best that can be hoped for is that they may undergo calcareous degeneration. But meanwhile the patient is kept in bad health, and the glands may extend and cause other and more serious complications. At the Margate Infirmary Mr. Treves has excised such glandular swellings for many years, and without meeting a fatal result. Their removal requires time, care and patience, but is not very difficult.

As regards the operation, Mr. Treves gives the following useful hints: The entire removal should be effected by dissection alone; no directors, handles of scalpels, or fingers should be used to separate the glands from the surrounding cellular tissue. Cut down on the surface of the mass, dissecting the cellular tissue as closely off the capsule as a nerve is cleaned in the dissecting room. Cut always on the capsule, and never allow the knife to stray from its surface. When sufficient of the anterior surface is exposed, pass a thick thread through the gland, draw it gently forward, and, continuing the dissection, get gradually to the back of the gland, removing thus portions of the mass at a time, each portion comprising perhaps one gland, perhaps several closely connected with each other. In this way the mass is gradually removed. If the plan of cutting on the capsule is strictly adhered to, it is not easy to divide any vessel of importance without doing so intentionally; whilst, if it is not followed, the jugular vein will probably be incised, as the deep glands lie along and are more or less adherent to its sheath. I have several times had to divide the external jugular vein and twice the sterno-mastoid muscle, but as a rule, the glands can be pushed or pulled from underneath this muscle. In none of the cases has there been any serious hæmorrhage, and all the cases operated on have recovered. In one of the cases I accidentally opened the internal jugular vein; it was tied above, below, and at the point of incision, and no evil result followed.

"As regards treatment of the wound, anything like retention of blood, serous oozing, or discharge is attended with such serious consequences that latterly I have not ventured to suture the skin flaps, except, perhaps, a single stitch to keep them in proper line. If the flaps are sewn together, hollows must be left underneath in the space the gland tumor has come from. I have also found irritation set up by drainage tubes. I have preferred, therefore, to let the flaps adapt themselves to the tissues underneath, supporting them by pads of antiseptic cotton. Strict antiseptic precautions are used in the dressings. The patient, when put to bed, has his head and neck fixed by sand-bags; he is not allowed to move or talk, and is fed entirely on liquid nourishment so as to avoid the movements of mastication. I have found, as might have been expected, that the tissues of the neck have great healing power, but are equally prone to inflammation from the irritation of tubes or from the slightest obstruction to the free exit of discharge. In fact, it is a part which is powerful alike for good or for evil. A drainage tube may safely and with advantage be passed into the hollow capsule of a gland after scooping, but it does not rest easily if laid among the deep cellular tissue of the neck."

PRACTICAL ASPECTS OF DISINFECTION.

Practical disinfection is a subject to which much attention is given by European city health authorities. In America, while considerable attention has been given to practical disinfection in some places, there is far too little practical work done. In the minds of many people disinfection means only the placing of Condy's Fluid, or of carbolic acid solution or powder about the rooms in saucers, or sprinkling deodorants about the place to be disinfected. According as we wish to secure disinfection of infected clothing or bedding, to render infectious discharges harmless, or to purify the interior of an infected room, we must select a different method of disinfection. Dr. D. S. Davies, Medical Officer of the City and County and Port of Bristol, has recently given some useful advice on the practical aspects of disinfection,

in a paper published in the *Bristol Medico-Chirurgical Journal*, June, 1888.

For the disinfection of infected clothing or bedding, superheated steam is at once expeditious and reliable. The apparatus used by the Bristol Sanitary Authority is a steam disinfector, with an internal capacity large enough to contain any sized mattress, and is surrounded by a steam jacket, which admits of superheating and thus drying the steam in the central chamber. Steam is supplied from a separate boiler. It takes only about an hour to get the machine into working order, and a roomful of bedding and clothing can be disinfected in another hour. The machine works so rapidly that more than 10,000 articles have been disinfected thoroughly during the first three months of 1888; with the two gas-heated dry-air disinfectors in use in Bristol previous to 1887 this would have been impossible.

Assuming that home-nursing of smallpox is inadmissible under ordinary circumstances, how should the infected linen be dealt with during the contact of a sick case at home—say one of scarlatina? The linen need only be boiled to ensure complete disinfection. But as a rule it cannot be boiled immediately, and while it is awaiting this it should be steeped either in a solution of corrosive sublimate, 1:1000, or in carbolic acid solution, 2 per cent., or thymol, 1:1000. The articles should be kept continuously wet until placed in the boiling water. Other than this no other process can be carried out at home except destruction by fire. Fumigation by sulphur or chlorine vapor, says Dr. Davies, is worse than inefficient, because it tends to promote a false sense of security.

When infectious excretions or discharges are to be dealt with the use of chemical disinfectants in solution is especially indicated. It is particularly necessary in such cases that all discharges be at once received into, well mixed with, and covered by chemicals of sufficient strength. Probably the most suitable solution is an equal bulk of corrosive sublimate solution, 1:1000. After this the discharges may be disposed of as usual.

While an infectious disease continues in a house all drain and waste pipes should be kept flushed with chemicals; but such chemicals should not be trusted to cover or remove drain-smells in a house or in the street. These smells point to defective construction, and reconstruction alone will suffice to remove the danger. While the public sewers should be so constructed as to carry off the sewage immediately to a safe point of discharge, and thus prevent putrefaction, it will be useful in time of epidemic to disinfect them systematically with chemicals.

Gaseous disinfection, which is generally most convenient for the disinfection of room-spaces, Dr. Davies has found unsatisfactory as to results. Chlorine and bromine, while more effectual than sulphurous acid, can be relied upon to destroy fully-exposed organisms only, and to secure full efficiency the air should be simultaneously saturated with watery vapor. "Dependence upon these gaseous agents for the disinfection of clothes, blankets, and similar articles is obviously fraught with extreme danger; and yet in many populous districts the local authorities responsible for the public health have no more certain means of disinfecting such articles. When we consider that the desquamative periods of many infectious diseases, notably smallpox and scarlet fever, are periods of extreme danger, during which infective material is given off with the dried epithelial scales in a readily portable form, and during which bedding and clothes become loaded with such infectious particles; and when we further remember that this desquamation of infectious particles takes place similarly in the mildest as in the most severe cases, it becomes at once obvious that efficient means for disinfection of such articles by hot air or steam is a first necessity, and that where such efficient means are not available, contagion is likely to be largely carried by means of "fomites"—a fact that especially applies in cases where one of these diseases has been nursed for any length of time at home." Dr. Davies has now discarded chlorine on account of its very destructive action, and with sulphur for disinfecting empty room-spaces he has had uniform success. The room should be made as air-tight as possible, a large proportion of sulphur should be burned, and the operation should be continued for some time. Thorough scrubbing and ventilation are then secured, and if the patient has been nursed at home, the rooms are, when possible, re-plastered and re-papered.

It should be remembered also that in the desquamative diseases inunction with vaseline or oil, to which camphor, carbolic acid or thymol may be added, is an important measure, and if the surface of the patient's body be kept constantly moist

in this manner there is much less likelihood of contamination of the air by infectious particles. Or a wet sheet, saturated and kept moist with carbolic acid solution, preferably mixed with glycerine, may be used in such cases.

REFLEXES FROM INTESTINAL IRRITATION.

There are few subjects in medicine more interesting than the study of abnormal reflexes. Some authors have gone so far as to deny that there is any such thing as paralysis due to reflex mechanism; that the cases of paralysis of which amaurosis from affections of the fifth nerve, and paralysis of the orbital nerve from like cause, are examples, may be explained without reflex mechanism; and that there is no true conception of the manner in which reflex paralysis is brought about, unless we understand that it is produced by inhibitory influence, and that reflex paralysis, if it have any meaning, must be inhibitory paralysis. They that go so far as this deny the necessity of admitting inhibitory paralysis.

Among the various causes of reflex disturbances intestinal irritation is known to play an important part. Cases of paralysis of the arm from gingival and intestinal irritation, of hemiplegia from intestinal irritation, of aphasia from the same cause, and of other disturbances from irritation of the alimentary tract, while not common, are by no means unknown. Such cases have been reported by Kennedy, Gomez Torres, Fränkel, Corbett, McKendrick, Moll, Molard, Fox, Eggleston and others. McKendrick's case was that of a woman that had suffered for seven months from a partial paralysis of the lower limbs; she passed a tape-worm nearly twenty-two feet long, and within four days had completely regained the use of her limbs. Fuller reported the case of a boy who had paralysis first of the right and then of the left leg, and recovered after a dose of santonine, which brought away a large number of dead lumbricoid worms. Moll's case was that of a woman who suffered for three months from paralysis of the upper extremities, and recovered after the expulsion of a tape-worm. Eggleston's case was that of a case of reflex paraplegia and aphasia from tape-worm, the child recovering after the expulsion of the worm.

From a record of cases carefully tabulated and extending over a number of years, Mr. Jabez Hogg finds that strabismus in young children is more frequently due to the irritation of intestinal worms than is generally supposed, and he reports (*British Medical Journal*, July 21, 1888) a case of amaurosis and strabismus from ascaris lumbricoides. It is certainly very uncommon to find reflex amaurosis and strabismus associated in the same person, and arising from the same cause—the presence of worms in the intestines. An equally interesting feature in this case was the presence in the patient, a little girl of barely three years, of three kinds of entozoa: oxyurides, tænia, and ascaris lumbricoides, for it has been held that these three kinds of worms will not exist together. Mr. Hogg removed the parasites by means of anthelmintics, beginning with scammony and jalap, which brought away a large number of ascarides. Filix mas removed the tape-worm, and santonin followed by castor oil brought away several large lumbrici. The patient began to recover her sight, the strabismus has entirely disappeared, and at the time of the report the general health, which had been greatly impaired, was much changed for the better.

EDITORIAL NOTES.

An Army Medical Board will be convened in New York City, New York, October 1, 1888, for the examination of such persons as may be properly invited to present themselves before it as candidates for appointment in the Medical Corps of the Army. Application for an invitation should be addressed to the Secretary of War, stating date and place of birth, place and State of permanent residence, and accompanied by certificates, based on personal acquaintance, from at least two persons of repute, as to citizenship, character, and moral habits; testimonials as to professional standing, from the Professors of the medical college from which the applicant graduated, are also desirable. The candidate must be between 21 and 28 years of age, and a graduate from a regular medical college, evidence of which, his diploma, must be submitted to the Board. Further information regarding the examinations and their nature may be obtained by addressing the Surgeon-General U. S. Army, Washington, D. C.

Supposed Ice-cream Poisoning.—At the annual banquet of the alumni of Marietta College, Ohio, held in the latter part of June, a number of

persons were made ill after eating ice-cream. Five persons have since died, the last one on August 6, and another is still dangerously ill. It is said that the cause of the sickness will probably be investigated, though it seems rather late to begin now.

BULGARIA, according to Dr. J. Bradel, of Sophia, has now a well organized sanitary service. There is one chemical laboratory, in which the work is almost exclusively medico-legal and sanitary. The medical officers of health have, among other duties, that of inspecting animals intended for food, and of investigating any complaint against a seller of food articles.

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION will hold its first annual meeting at Birmingham, Ala., on September 11, 12, and 13, 1888. The programme of the meeting may be found in the department of miscellaneous items in this week's issue.

THE AMERICAN ASSOCIATION OF OBSTRETRICIANS AND GYNECOLOGISTS will hold its first annual meeting at Washington, D. C., on Sept. 18, 19, and 20, 1888. The programme for the meeting will be found in another department.

AMERICAN MEDICAL ASSOCIATION.

Report of the Sub-Committee on Infant Feeding,

Made at the Thirty-ninth Annual Meeting of the American Medical Association, May, 1888.

Your Sub-Committee on Infant Feeding respectfully reports that it has only had the subject under consideration for about two months, and during this time it has opened correspondence with some of the leading authorities both in this country and in Europe upon the very important questions submitted to it, especially with reference to the proper diet of infants. Though not prepared to make a final report upon the subject at present, it believes that some facts have been elicited which are valuable; and which are of sufficient interest to bring before this Association.

Thus far, replies have been received from Dr. Eustace Smith, of London; Dr. J. Lewis Smith, of New York; Dr. Victor C. Vaughan, of Ann Arbor, Mich.; Dr. Geo. H. Rohé, of Baltimore; Dr. F. Forchhiemer, of Cincinnati; and others, to whom we desire to return thanks for their assistance and courtesy. (The correspondence and replies to queries submitted are appended to this report.)

The leading facts thus far may be very briefly stated as follows:

1. In the case of an infant, or a child under ten months of age, deprived of breast-milk, the artificial substitute provided should be made to correspond with human milk as closely as possible, both in its chemical constitution and its physical characters.

2. Fresh, unadulterated cow's milk, when properly prepared, is an acceptable substitute for cow's milk. But since the casein of cow's milk coagulates in a heavy, dense mass, while breast-milk curd is light and flocculent, some expedient must be resorted to in order to make the former resemble the latter, so that the digestive powers of the infant shall not be unduly taxed. The casein of cow's milk, according to Dr. Eustace Smith, as the rule, traverses the infant's alimentary tract and may be found unchanged in the fæcal discharges. It is, therefore, a constant source of irritation, and often gives rise to diarrhœa and entero-colitis. One of the most decided advances in dietetics in modern times, is the preparation of cow's milk with the aid of digestive agents, as in the method recommended by Professor Frankland. In this method the casein of a portion of the milk is first peptonized by fresh calf's rennet, and to this is added a portion of fresh milk, after heat has been applied to check the process and to prevent complete predigestion; some milk sugar is finally added, and thus a mixture is obtained which closely approximates human milk in its chemical composition. It has, moreover, been found to serve as an efficient substitute where the mother's milk is of poor quality, is inadequate in quantity, or is entirely wanting. The special feature of this method is the peptonizing of only a part of the casein, with the employment of heat at a certain stage to arrest the process so that the food shall not be completely digested. The addition of the carbo-hydrate (milk sugar, in this case) is necessary, in order that the food shall closely resemble human milk. The employment of stale, foul smelling, partially decomposed digestive ferments, for the purpose of preparing cow's milk for infant's food is condemned. The necessary skill and intelligence required to insure uniformity of results for the extemporaneous peptonizing of milk is rarely to be found in the household, and where this process is adopted, the experiment often turns out to be unfortunate and injurious to the child.

3. As a rule, raw starch is inadmissible in the diet of young infants, because the digestive powers of the infant are rarely sufficiently active to convert crude starch into a soluble form. The plan advocated by some, of adding starch to the milk in order to mechanically break up the curd, is unphysiological and very objectionable. The

products of the complete digestion of starch are glucose and saccharose (maltose), and these, in various forms, have been recommended to be used as additions to the milk under the name of "Liebig foods." When in excess, these substances cause diarrhœa, and when administered alone do not sufficiently nourish the child. Dr. J. Lewis Smith speaks favorably of dextrine, which is a partially digested starch, as a good substitute for glucose and saccharose in artificial foods. The fact cannot be too strongly insisted upon, which is taught both by clinical experience and by physiological investigation, that the food of either infants or adults, except in special emergencies, should never be fully predigested, for fear of permanently weakening or destroying the digestive functions of the stomach.

4. A great part of the large mortality of infants in all our cities is due to the bad quality of the milk supply, particularly that going to the poorer classes. Professor Vaughan declares that many deaths from so-called cholera infantum are really caused by milk containing tyrotoxicon. Authorities are almost unanimous upon the point that in large cities, at least during hot weather, all milk for the nursing bottle should be boiled several times a day in order to destroy ferment germs. It is better, at such time, that the food should be freshly prepared for each feeding. In some cases, owing to the variability in the quality of the milk-supply, it may be advisable to resort, for a short time, to condensed or to evaporated milk; in either case diluting and adding cream, or an equivalent soluble carbo-hydrate, in order to make an artificial breast-milk. Desiccated partly peptonized milk, in the form of a milk food, containing partly converted starch (soluble starch, dextrine, and a small portion of lactose) is a convenient (and when well made, a very efficient) substitute for the mother's milk.

5. Where the child is a premature birth, or is feeble from other causes, as great care should be observed in preparing its food as in prescribing its medicine. Experience has demonstrated that success in infant-feeding is dependent upon the ability to individualize the patient, and to select the proper food for each case. For very delicate infants the mother's milk is often found not only inadequate to properly nourish the child, but also positively injurious. This is generally admitted where some obvious dyscrasia exists, as the tuberculous or syphilitic. It is a fact that in such feeble infants artificial mixtures can be made which will agree with the weak digestive functions and satisfactorily nourish the child.

In conclusion, your Sub-Committee would direct attention to the remote and far-reaching effects of the mal-nutrition resulting from improper feeding in early life, to be witnessed in chronic invalidism or in premature death of the individual, and to the inevitable physical degeneracy threatening the race where the principles of infant dietetics are neglected. In view of the importance of the subject, the Sub-Committee respectfully asks to be continued in order to further investigate the matter, and to report to the next meeting.

All of which is respectfully submitted.

FRANK WOODBURY, M.D.,
Chairman of Sub-Committee on Infant Feeding.

Question 1.—Are malt sugar foods liable to produce abnormal fermentation in the stomach, especially with infants? Do they often do so? Can you assign the reason in cases where it occurs? Is maltose in excess in the food of infants objectionable, and why?

I have never seen any signs of fermentation which I could attribute to the influence of maltose. It is true that all infants cannot digest maltose or malted foods, but even in these cases I have never seen reason to suspect the difficulty to be due to the fermentation of maltose. (Eustace Smith.)

I believe that all sugar in excess of that normally contained in mother's milk is liable to undergo fermentation before it can be absorbed, and hence, by interfering with the normal decomposition of the bile in the prima via, hinders absorption of fats and possibly of peptones, and so interferes with nutrition. (Rohé.)

It depends entirely upon what form the malt sugar is administered in. In general it must be said of the carbohydrates that they are best administered to infants in the form of glucoses. Maltose is not a glucose and ought not to be administered to such infants, in whom the salivary and pancreatic functions have not been established. In regard to the sugar ferment of the stomach nothing is known as far as relates to infants. (Uffelmann's case is the only one on record, and that was in a boy.) (Forchheimer.)

Yes. Malt sugar undergoes fermentative changes very readily and does harm often when used as an ingredient of infants' foods, on account of its fermentation. (Vaughan.)

Maltose can be assimilated by the infant only in very small quantity. When administered in excess it gives rise to diarrhœa, probably owing to its fermentation. It is also objectionable because it starves the tissues, while it increases the fat, giving an appearance of plumpness and health to the infant which, however, is delusive, as seen by its feeble powers of resistance to disease. (Woodbury.)

Question 2.—If the Liebig or malt-sugar foods are likely to ferment in the stomach before assimilation commences, is it advisable to add them to cow's milk, in which the resulting acidity tends to transform the casein into indigestible curds?

I do not think it advisable to add maltose to cow's milk in greater quantity than would be necessary to raise the proportion of sugar in cow's

milk to make it correspond in this respect to human milk. For this purpose, I think pure cane-sugar is preferable to preparations of uncertain composition. (Rohé.)

In Liebig's food the starch is converted to dextrose, as well as into maltose. (Forchheimer.)

It is not advisable to add malt-sugar to cow's milk which is to be used for infants' food. (Vaughan.)

As ordinarily practiced, the feeding of children with Liebig's foods with (milkman's) cow's milk is not advisable, and often distinctly injurious. (Woodbury.)

Questions 3 and 4.—Should not dextrine be preferred to malt sugar for ingestion in the case of infants, and if so, for what reasons? Can dextrine ferment before it is changed to sugar?

With regard to the first four questions relating to the fermentability of malt extract, I think they should be addressed more appropriately to the physiological chemist than to the physician. (Eustace Smith.)

I have no opinions to offer upon these points. I have seen it stated somewhere that dextrine does not ferment before it is changed into sugar, but this is not remarkable, since dextrine is simply one of the stages of the process by which starch is converted into sugar, or, carrying the process further, into alcohol and acetic acid. But I can readily understand that it may be advantageous to have something for the amylolytic ferments present in the saliva and pancreatic secretions of even quite young children to act upon, rather than that these ferments should be mingled with the food in the stomach and intestinal canal, without an opportunity of undergoing their physiological decomposition. (Rohé.)

Dextrine must first be converted into dextrose before it can be utilized by the economy. Dextrine, which is a starch, cannot be fermented until converted to dextrose (grape sugar). (Forchheimer.)

Dextrine is preferable to malt sugar, because it (the dextrine) does not ferment so readily. I do not think that dextrine can undergo fermentation before it is converted into sugar. (Vaughan.)

The chemistry of the different forms of glucose is still in an unsettled condition. I am opposed to an excess of any form of grape-sugar in the diet of infants. Dextrine is partially digested starch, and is readily converted into dextrose by the digestive fluids. It is preferable to maltose because it affords an opportunity for physiological activity of the digestive fluids containing ptyaline (salivary and pancreatic secretions, succus enterious). (Woodbury.)

Question 5.—Will any of the ordinary artificial "infant foods" now in the market thoroughly nourish the child without the addition of cow's milk?

No artificial food will efficiently nourish an infant unless cow's milk be added; for all preserved foods want the living antiscorbutic principle, which is only to be found in fresh foods. In other respects many of them, such as the dessicated milk foods, contain in themselves, as far as I know, all the elements of nutrition. (Eustace Smith.)

None of those foods which I have studied, either theoretically or practically, seem to me to fulfil the indications. It seems strange, however, that, with the large amount of definite knowledge we possess upon the physiology of digestion, chemists have hitherto failed in giving physicians a trustworthy preparation based upon physiological principles. (Rohé.)

Yes, provided you include milk foods, as ———'s or ———'s. (Forchheimer.)

Yes, there are one or two. (Vaughan.)

I think that a good milk food answers the requirements very acceptably. (Woodbury.)

Question 6.—Do the ordinary so-called infant foods add any constituent to cow's milk which it does not contain in sufficient quantity already?

I do not think that the ordinary infant's foods add any constituents to cow's milk which it does not already contain in sufficient quantity, but many of them by presenting certain of the constituent in a more digestible form, may contribute greatly to the nutrition of the infant. For instance, few children digest a sufficient quantity of the curd of cow's milk. The greater part of the casein in the shape of a dense tough mass of cheese, passes almost unchanged by the bowels. Where this is the case, the child runs a great risk of being under-nourished unless he assimilates some substitute for the missing curd. This may be supplied by the addition of a well-selected infant's food. (Eustace Smith.)

None, in my opinion, except sugar. (Rohé.)

Yes. (Forchheimer.)

Yes, the best add dextrine. (Vaughan.)

If the cow's milk is diluted, some of the foods do, by making up the deficiency of carbo-hydrates or hydro-carbons. (Woodbury.)

Question 7.—Should not all the infant foods that are required to be given with cow's milk of ordinary quality be rated in value as sugar only?

I cannot answer. (Eustace Smith.)

Yes, because any other constituents are unnecessary and probably injurious. (Rohé.)

No, salts and some sugar. (Forchheimer.)

Yes. (Vaughan.)

There are many that are inferior in food value to plain sugar. (Woodbury.)

Question 8.—Do any of the "milk foods" contain more than 15 per cent. of solid constituents of cow's milk?

I cannot answer. (Eustace Smith.)

I have before me, as I write, a preparation for which the claim is made that it contains 50 per

cent. of cow's milk. Now, as cow's milk contains only 12 per cent. of total solids, there are in this special preparation only 6 per cent. of milk solids. Another preparation, in my hands at this moment, is said (on the label) to contain 50 per cent. of the solid constituents of the milk; the other, 50 per cent. is said to consist of dextrine and soluble starch. I have had no practical experience with this preparation. However, if the claim made for it is true, this would answer the question in the affirmative. (Rohé.)

Yes, if I understand the question correctly. (Forchheimer.)

Yes. (Vaughan.)

I do not know. (Woodbury.)

Question 9.—Recognizing that the casein of breast-milk is partially a peptone, must not cow's milk, with its tough casein, be illy adapted to the rearing of infants whose digestion is feeble in comparison with that of the calf?

I think the cow's milk should be specially prepared for the infant's stomach, whether by predigestion or otherwise. (Eustace Smith.)

In practice I have found that many infants can digest the casein of cow's milk, but this presupposes intelligent feeding which is not always attainable. Such children, however, much oftener suffer from digestive derangement than nursed infants (Rohé.)

I do not recognize the casein of breast-milk "as partially a peptone." Human milk does contain a small quantity of peptones, but we are far from certain that they are derived from the casein. (Forchheimer.)

Yes. (Vaughan.)

Yes, especially if the infants are at all delicate. (Woodbury.)

Question 10.—In view of the difference in the character of the casein of human milk and cow's milk, is it not advisable to have the cow's milk partially pre-digested, or sufficiently so as to render it like the casein of human milk and as readily digestible by the infant?

Cow's milk should be especially prepared for the infant's stomach, either by predigestion or otherwise. (Eustace Smith.)

If this could be attained in practice, I think it would be a great advance in the art of nourishing children deprived of breast-milk. The preparation referred to (under 8) is said to be partly so digested. The claim deserves investigation by experts. (Rohé.)

If cow-casein could be so changed as to be identical in all its properties with human casein, the problem of artificial feeding would be almost solved. (Forchheimer.)

Yes, this is a very important point. (Vaughan.)

This is a consummation most devoutly to be wished. (Woodbury.)

Question 11.—When farinaceous foods are added to cow's milk for the purpose of preventing the hard coagulation of casein by their physical action, do they not add another indigestible element, and is not their value for the purpose dependent upon their insoluble or indigestible character?

Cow's milk should be especially prepared for the infant stomach (answer to previous question). If this be attempted by the addition of flour or similar starchy compound, I think the farinaceous addition contributes little to the nutrition of the infant. (Eustace Smith.)

I think the practice objectionable at least before the child has reached the 10th month of age. (Rohé.)

It depends entirely upon the age of the infant. (Forchheimer.)

Yes. (Vaughan.)

Yes, the object of adding corn-starch or similar substances to cow's milk is avowedly to make the curd less cohesive, and not to add any nutritive element to the food. (Woodbury.)

Question 12.—Is the peptonizing of cow's milk practical in the household, and can it be uniformly and properly performed by the nurse or mother, or does it require the supervision of an experienced chemist?

The peptonizing of cow's milk is quite practicable in the nursery; the ordinary process does not digest all the curd, but still enough for all practical purposes. (Eustace Smith).

In a few cases I have been able to make mothers understand the process of peptonizing milk, but in the majority of instances my efforts have not been rewarded by success. The proceeding is so troublesome that mothers get careless, and nurses—well, the people who need nurses most are generally unable to employ them. (Rohé.)

No. The method most comonly used (——'s) is bad; and it is the only one which can be carried out by the intelligent (!) attendant. (Forchheimer.)

It should be done under the direction of a competent chemist. Nurses will not do it as it should be done. (Vaughan.)

I consider it impracticable. The women intelligent enough to conduct the process properly are engaged in teaching in some college, and if married, rarely, if ever, have children. (Woodbury.)

Question 13.—For infant feeding should the casein of cow's milk be wholly pre-digested, or fully peptonized, and if not, why?

I think it objectionable to relieve healthy organs of any of their duties; hence, I object, in the interest of the future health of the individual, to wholly peptonize, pre-emulsify, or prepancreatize any food. While there may be no exact observations on record, I think a stomach whose peptic glands are not called into use might get out of the habit of digesting altogether, and so

be of no more use to the individual than a bag of rubber which had the power of rythmical contraction. (Rohé.)

I think that peptones, not peptonized milk, can be used to great advantage in proper cases. Peptonized milk is out of the question, as we have no method by which this can be obtained with accuracy. The use of pancreatic ferments in my opinion is fallacious, as it introduces into the intestinal tract, especially very young ones, products that are decidedly dangerous in their actions. I have made some experiments with the process which has pushed me to the conclusion that my reasoning is correct. I have seen infants under 2 months do well on cow's milk when they would have died with mixture. One series of experiments was conducted upon foundlings, half of which were given milk undigested and the other half digested. The result was that those on milk did well, and the other half had to return to milk, otherwise they would have died. Besides, tryptic and stomachic digestion do not agree together. (Forchheimer.)

The casein should not be wholly digested. It is unscientific to feed a child upon food, the proteids of which are wholly digested. The stomach must have some work to do, or it will become enfeebled by disease. (Vaughan.)

It is unphysiological. (Woodbury.)

Question 14.—Since pancreatine is itself subject to putrefaction, should it not therefore be used for the purpose of digesting milk when freshly made? Is the offensive odor of some pancreatic preparations that are sold in the market due to impurity or decomposition? Is there danger that such putrefactive changes are likely to impart deleterious qualities to the milk?

The pancreatine should, of course, be used before it has putrified and lost its properties. (Eustace Smith.)

I think it highly probable that ptomaines may result from the decomposition of pancreatic ferments. I must confess, however, that I have no observations upon this point beyond the violent appeal to my olfactories made by some pancreatic preparations. (Rohé.)

Whatever has been said about ——'s is true of all pancreatic products, (Forchheimer.)

Yes, the offensive odor comes principally, I think, from impurities; though even a pure preparation, if it could be obtained, would probably decompose. (Vaughan.)

Unless nastiness is a recommendation, most of the commercial digestive preparations should be excluded from the household. (Woodbury.)

Question 15.—What proportion of cow's milk found in our large cities during the summer months is in a proper condition to feed children? Is not the cause of the great mortality at this season largely due to fermentative changes taking place in the milk before it reaches the consumer?

In large cities during the summer, cow's milk brought from a distance is, no doubt, often far from fresh and therefore ill-adapted to further healthy nutrition, if not actually injurious to the recipient. (Eustace Smith.)

Sanitarians are agreed that the methods of milk supply in large cities urgently demand reform. There is no doubt that during the hot weather of summer, decomposition sometimes occurs in milk which renders the latter violently poisonous. The outbreaks of tyrotoxicon poisoning so well studied during the last two years by Professor Vaughan, Drs. Newton, Shippen, Wallace, and Professor Shearer, of Iowa, prove this. Added to this danger is that of allowing milk from tuberculous cows (and nearly all city cows are tuberculous) to be sold. I have advocated the inspection of milk by qualified officials in this city, (Baltimore,) but I am sanguine that such inspection would remove the most serious danger, which is not adulterated milk, but milk that is unwholesome or dangerous from other causes. (Rohé.)

I know of but three milk men in this city (Cincinnati) who supply milk which can be absolutely relied upon in summer. Yes. (Forchheimer.)

I think that poisonous milk is the cause of a large per cent. of the mortality among children, especially among the poor classes of our large cities. It would be impossible to say what proportion of the milk supplied to the cities becomes unwholesome in the hands of the small retail dealer, and also after it has been sold to the poor, who have no means of keeping it at a low temperature and in a non-vitiated air. (Vaughan.)

To the dangers from adulteration with ditch water or that from infected pumps, we have the possibility of metallic poisoning from the cans. (See article relating to this subject by Dr. Geo. Hall, in the *Philadelphia Medical Times*. (Woodbury.)

Question 16.—What recent advancement has been made in foods for infants that is worthy of consideration in furnishing us with an artificial food at all analogous to, or approximating towards, human milk in composition and digestibility?

I have no personal knowledge of such advancement. (Rohé.)

None. The last was ——, only applicable to individual cases, however. (Forchheimer.)

It is possible that such an advance has been made; the matter is still under trial before the profession. (Woodbury.)

I think that the addition of dextrine instead of sugar or starch to the milk solids, and the partial digestion of casein are important advances. (Vaughan.)

FOREIGN CORRESPONDENCE.

LETTER FROM VIENNA.

(FROM OUR OWN CORRESPONDENT.)

Dextrocardia—Conservative Cæsarean Section—Tuberculosis Verrucosa Cutis—Syringomyelia—Extirpation of the Initial Sclerosis and the Lymphatics in Syphilis.

An interesting discussion on dextrocardia has recently taken place in the Imperial Royal Society of Physicians of Vienna. The impulse towards such an exchange of opinions, in which Prof. v. Bamberger and Prof. Kundrat took part, was given by the demonstration of a case of congenital dextrocardia by Dr. Gruss. The patient, a girl 29 years old, had suffered in her youth from measles and varicella; at the age of 14 years she was the subject of peritonitis. It was stated that at her birth her grandmother had felt the beat of the heart on the right side of the chest. Until the twentieth year of age the patient had suffered from dyspnœa, palpitations of the heart, and at present she invariably has a sensation of cold. On the percussion of the chest a clear sound was noticed all over the left side, whereas a dull percussion note was found to be present on the right side, commencing over the third rib and reaching as far as the liver; the pronounced dulness of percussion was moreover to be observed over an area which extended from the right sternal margin and approximately reached as far as the middle between the mamillary and the anterior axillary line. On auscultation two clear sounds could be heard anywhere, of which the first one was accompanied by a murmur, whereas the second sound was much accentuated. The cardiac murmur could also be noticed over both the carotid arteries; in the rest, the peripheral arteries were narrow and the pulse small, but synchronic with the action of the heart. The visceral organs had their normal position.

Dr. Gruss was led by this complex of symptoms to diagnose a condition of pure dextrocardia with transposition of the great blood-vessels and congenital stenosis of the pulmonary artery. The murmur mentioned before was, in his opinion, due to stenosis of the pulmonary artery.

Prof. v. Bamberger first wished to lay stress on the fact that dextrocardia *per se*, without a *situs viscerum inversus*, was to be met with in exceedingly rare cases. In the course of forty years he had observed twelve cases of *situs viscerum inversus*, but only three cases of pure dextrocardia. From the cases which had been gathered by Prof. v. Schrötter it became evident that in the great majority of conditions of dextrocardia, a congenital disease of the blood-vessels was also present. In one case which the lecturer had observed, there was surely no congenital disease of the blood-vessels present, and the insufficiency of the mitral valve was derived from endocarditis after rheumatism.

Prof. v. Bamberger then discussed the case under consideration, which had a particular interest owing to the symptoms found on auscultation. The murmur which was heard was one characteristic of a stenosis, and the question now arose as to whether the conus arteriosus or the valves were stenosed? The stenoses of the conus arteriosus were exceedingly rare, and they were usually of a congenital origin, as they were due to a myocarditis during the fœtal life. The stenoses of the valves, however, were very frequent and were to be met with in all the periods of life. In the case under consideration there was the question of a stenosis of the conus arteriosus, as the second sound was clear and sonorous, which was not to be met with in stenosis of the valves. The further question was as to whether the stenosis was present in the aorta or the pulmonary artery? The small pulse would be in favor of the admission of a stenosis of the aorta, but the fact that the second sound was clear and sonorous pointed to an increase of the blood pressure, which was not present in the case of stenosis. The small pulse, in spite of the augmented blood pressure in the aorta, was to be explained by the fact that the ductus Botalli had remained open in this case, and that a large portion of blood was thrown through it into the pulmonary artery.

Prof. v. Bamberger was not of the opinion that a transposition of the large blood-vessels was also present in this case. Such a condition could not, moreover, be at all diagnosed; it was only known from the pathological anatomy. When the arterial blood, in such a case, was thrown through the pulmonary artery into the lungs, and the venous blood into the aorta, the life of the respective individual was quite impossible. When a total transposition was present, when all the parts of the heart had an inverse position, no disturbance whatever resulted from such a condition.

Prof. Kundrat, professor of pathological anatomy, remarked that the opinions on the transposition of the large blood-vessels were not yet settled. He, therefore, wished to show two such cases and to discuss them at full length. The pure transposition of the heart was a very rare condition, and in such cases it was not the question of a simple dextrocardia, but these were cases in which the right part of the heart was situated on the left side, and the left part on the right one, hence quite the same conditions as in *transpositio viscerum totalis*. In such cases the apex of the heart was directed towards the right side, the pulmonary artery equally to the same side, and the aorta to the left one. The position of the apex of the normal heart on the left side was to be explained by the development of the cardiac tube (cardiac tract). No mechanical conditions whatever could

dislocate the heart out of this position; it was always dislocated *in toto*. If the apex of the heart were, in such a case, dislocated towards the right side, the heart would have to be cracked (nicked), and a complete interruption of the circulation would be the result.

As to real dextrocardia, Prof. Kundrat had hitherto found it only in cases of monstrum duplex in which both the hearts were contained in one pericardium; furthermore, in the case of total transposition of the viscera. Dextrocardia was, however, also to be met with under other conditions, and such were reported by Brechet, G. St. Hilaire, Förster, and others, but the conditions respecting the blood-vessels were not discussed by any one. The dextrocardia was necessarily combined with abnormal conditions of the veins. As the atrium, which receives the large veins (the superior and inferior vena cava) was not normally situated, as its position was on the left side, the development of the venæ cavæ had also to be an abnormal one, and there were also other abnormalities in the development of the heart and the large blood-vessels. In one case of real dextrocardia, which had been observed by Prof. Kundrat, the aorta was inclined towards the right side and was much more developed in comparison with the pulmonary artery; the heart was, properly speaking, triloculary, as it had one ventricle and two defectively developed atria, which were separated from each other.

The dextrocardia could also be combined with a transposition of the large blood-vessels, the aorta, in such a case, having its direction towards the former and right side, the pulmonary artery towards the posterior and the left one. The statement that such a condition was inconsistent with the life of the individual, was not valid for all cases. By an abnormal direction of growing of the "septum ventriculorum," the abnormally situated trunks of the blood-vessels could be caused to discharge into the corresponding chambers of the heart; such a transposition was called a "corrected transposition." In most cases such a corrected transposition was, indeed, not observed, and this was the reason why most such individuals succumbed at an early period. In the case of real dextrocardia there were, usually, also other defective formations present, such as incomplete development of the septum, abnormalities in the size of the trunks of the blood-vessels, etc.

Prof. v. Bamberger replied that if Prof. Kundrat spoke of a corrected transposition of the blood-vessels, this was not the proper transposition, at least in the clinical sense.

Prof. Gustavus Braun brought forward before the same Society a woman, 37 years old, on whom he had, for the first time performed Cæsarean Section after the conservative method, owing to a relative indication. The patient had stated that eight days before her admission into the hospital the amniotic liquid had already commenced to discharge freely. The uterus showed tetanic contractions. On measuring the pelvis, the following conditions were found to be present. The distance of both the "spinal anterioses" was 23 centimetres, that of the centre 28, and the distance between the trochanters 29 centimetres. The perineum was rigid, the vagina narrow, and the vaginal portion of the uterus measured 2 centimetres in length. The conjugata diagonalis had a length of 10 centimetres, and the conjugata vera from 8 to 8½ centimetres. The head of the fœtus could be felt through the uterine orifice. As the uterus was contracted to such a degree that the inferior uterine segment became exceedingly dilated, and the child was still living, death of the fœtus and rupture of the uterus was to be feared. The hope of saving the child, and the fact that a delivery *per vias naturales* was combined with danger of life for the mother, induced the lecturer to perform Cæsarean Section after the conservative method, which was performed in the usual way. For closing the uterus, silver sutures and sutures of sublimated catgut were availed of. The sutures were secured, and the serous membrane was separately united, so that the contracting uterus could not give rise to any disturbance. After the removal of the elastic band some blood still escaped, which was stopped by means of a few sero-muscular sutures. After *toilette* of the peritoneum and reposition of the uterus the abdominal wall was closed by means of eight hooks, a dress of iodoform gauze was applied and the fœtid discharge from the vagina was removed by lotions of a solution of thymol.

The course of the operation was normal, and the temperature only once reached 38.3° C. A living child was extracted which had a length of 50 centimetres, and the weight of which was 2,900 grams. The present examination showed that the uterus was quite movable and that no adhesion to the abdominal wall could be proven.

Prof. Braun remarked that for more than thirty years and in more than 200,000 cases of delivery in the obstetrical clinics of the Vienna General Hospital, the Cæsarean Section for a relative indication, had not been made even once. The reason for this conduct of the obstetricians was the fact that in the pre-antiseptic times one was not able to promise the mother that her life would be saved.

Docens Dr. Riehl showed a man who was affected with *tuberculosis verrucosa cutis*, the so-called inoculated tuberculosis of the skin. This affection had been in former times considered by the lecturer as being a local and harmless process. The case under consideration, however, showed that a general infection with tuberculosis could also be the result. The affection in this case supervened owing to a slight lesion of the finger; a softening nodule developed there and other sim-

ilar nodules came on the arm; the lymphatic glands became also affected, there was, moreover, a catarrh of the apices of the lungs and hæmoptysis. The primary affection of the finger was at present surrounded by warty excrescences of the skin; ulcerating nodules were to be found on the back of the hand, the fore- and upper-arm. These nodules corresponded to the *gommes scrophuleuses* of the French, and it was of a great interest to learn that a well pronounced *tuberculosis verrucosa cutis* could give origin to the development of such *gommes*. It was, moreover, to be remarked that in the scars of some of these nodules there were also other solid and isolated nodules which bore a great resemblance to the nodules in the case of lupus. The present case was, therefore, also an evidence for the connection between lupus and tuberculosis, which was still denied by many dermatologists.

Prof. Kahler, in an important paper which he read before the Society of German Physicians, at Prague, discussed the possibility of a more exact clinical diagnosis of syringomyelia. The lecture was also illustrated by a demonstration of several patients. He first directed the attention of the audience to a case observed by him in former years, in which the *post-mortem* examination confirmed the diagnose of syrigomyelia in the cervical part of the spinal cord. The same complex of symptoms which had been present in that case was also, for the greatest part, to be found in the case which he now brought before the Society. The patient, a man, 26 years old, suffered for three years from emaciation and wasting disturbances on the hands. The affection first set in on the left side, and was then observed also on the right. No pains, but paræsthesias, and for the last time, also, disturbances of sensibility were present. For the last year particular trophic disturbances came on. They consisted in the formation of vesicles and ulcers, which first supervened over the skin of the right hand, and later on over the skin of the shoulders and upper-arms. The ulcers healed and hypertrophic and keloid scars remained behind. The muscular atrophy corresponded, as far as its intensity and its spread was concerned, to the type "Aran-Duchenne," and had hitherto remained confined only to the internal muscles of the hands. The patient, presented some symptoms on the part of the sympathetic nerve. These symptoms consisted in narrowing of the left eye-cleft and retraction of the eye-ball, as well as in narrowing of the left eye pupil. Prof. Kahler, in conformity with the German physicians, considered these symptoms as being essential for syringomyelia, and this was especially true of the ocular papillary symptoms which pointed to a participation of the centres of the sympathetic nerve in the cervical part of the spinal cord. When the disturbances of sensibility were for a long time the sole symptoms observed in such a case, this condition pointed to a preceding participation of the funiculi posteriosis of the spinal cord in the formation of the cavity in the matter of this organ. The lecturer then discussed the symptoms of differential diagnosis between the disease under consideration and the cervical myelitis, the compression of the cervical part of the spinal cord and the pachymeningitis cervicalis hypertrophia.

As to the anatomical basis of the syringomyelia, Prof. Kahler reminded the Society of the theory which had been established by Pick and himself, according to which the formation of the central cavity derived its origin from the dilated central canal of the spinal cord during the congenital life. The recent work of Schultze on the central glioma was, moreover to be taken into account.

Prof. Chiari delivered a lecture on syringomyelia from the anatomical point of view. He discussed a case of this affection of the spinal cord which he had recently examined, and in which the central long cavity in the spinal cord was to be looked upon as representing a chronic internal hydromelia produced by hyperplasia of the central glia-tissue and exudation into the central canal. The lecturer then passed over to the divergent opinions that exist in regard to the genesis of syringomyelia. Central and long cavities in the spinal cord of adults might be produced in a very different way, viz., by decomposition of a central glioma; secondly, owing to the persistence and further development of congenital abnormalities of the central canal; furthermore, by disturbances in the circulation of the spinal cord, or from myelitic softenings, lastly, they may be due to hydrocephalus internus, and as to the last explanation, Prof. Kahler thought that it had to be applied in the case he had mentioned before. In such a case there was a vegetation of the tissue of the ependyma and transudation from its blood-vessels into the central canal, which was possibly not pathological previously. The exact histological examination, and particularly the proof of the presence of the epithelial layer in the central cavities, was combined with the greatest difficulties. Prof. Chiari proposed to call all those cases in which there were central long cavities, and which were due to dilatation of the central canal, hydromelia interna, and to use the term syringomyelia only for those cases in which the formation of the cavity was surely in no connection with the central canal of the spinal cord. Such a condition was also to be met with more rarely.

Prof. Neumann read a paper on the subject of "Extirpation of the Sclerosis, together with the Lymphatic Glands, in the case of Syphilis," before a recent meeting of the Imperial Royal Society of Physicians, of Vienna. Among the numerous attempts at a preventive-cure of syphilis, it was chiefly the extirpation of the initial sclerosis which had been tried with a view of preventing

the development of constitutional syphilis. These experiments were, as was known, raised to the level of a regular method by the late Prof. Auspitz, of Vienna. The lecturer, owing to his clinical experiences, belonged to the adversaries of this method. They who remove each venereal ulcer, each gumma on the penis, and each chancroid, will, of course, also obtain favorable results, as the last mentioned affections remained free from consecutive appearances even without any extirpation of the local focus of the disease. This method had already lost many of its adherents, and was only availed of in cases in which phimosis to a high degree was produced by sclerosis. The method of an early removal of the sclerosis, together with the adjoining lymphatic glands, seemed to have a better chance of success. Vogt, in 1871, urged the removal of these "deposits" of the syphilitic virus for thus shortening the course of the disease and preventing an invasion of the virus from the local foci.

Bum, in 1882, had carried out the respective experiments; he inoculated on a healthy individual the milky serum of an indolent lymphatic gland which was due to sclerosis, and thus, after the course of four weeks, produced sclerosis and the consecutive appearances. Bum, for this reason, explained the bad success in the case of extirpation of the sclerosis by the supposition that the virulent foci were allowed to remain behind in the lymphatic glands, and, therefore, recommended the excision of the indolent lymphatic glands for obtaining better results. The early excision of the sclerosis and the lymphatic glands was also said to be of a prophylactic influence with reference to relapse and the occurrence of severe forms of the syphilis. Professor Neumann then showed a man who was affected with syphilis, and reported on the course of his disease. The patient was under his care for about five years. On the thirty-second day after the infection, the sclerosis and the adjoining lymphatic glands of the left inguinal region were removed. The wound healed by primary intention. On the fifty-third day after the infection roseola and papulæ nevertheless supervened on the abdominal wall. The patient took iodide of potassium, and twenty inunctions with mercury were performed on him. He remained in the clinic from June 13 until August 20, hence for 60 days in the whole.

On April 16 the patient again came into the clinic of the lecturer with the following appearance: Two scars, due to the above-mentioned operations, on the back of the penis and in the left inguinal region. The left testicle was the size of an apple, and the limits between the testicles and the epididymides had disappeared, so that these together formed but one tumor. Over the posterior wall of the pharynx there was a large oval ulcer, with undermined borders, and the basis of which had undergone a caseous process. A similar infiltration was present on the border between the uvula and the soft palate. The tonsils were also affected.

This case, Prof. Neumann remarked, sufficiently proved that even the early extirpation of the sclerosis, together with the lymphatic glands, was not able to prevent the development of the syphilis, nor could the intensity of the affection become impaired by such a course of treatment. The symptoms met with in the case now referred to, such as gummatous orchitis, syphilitic gummata on the pharynx and the soft palate, were to be considered as being severe forms of the syphilis. L. L.

MISCELLANEOUS.

AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.—*Preliminary Announcement of the Annual Meeting, to be held in Washington, D. C., September 18, 19 and 20, 1888*

Subjects: The President's Annual Address, William H. Taylor, Cincinnati.

Discussion. Extrauterine Pregnancy. 1. Pathology. 2. Diagnosis. 3. Treatment. *a.* Medical. *b.* Electrolytic. *c.* Surgical.

The Relations of the Abdominal Surgeon to the Obstetrician and Gynecologist, Albert Vander Veer, Albany.

Operation for an Unusual Case of Subserous Uterine Fibroid, Hampton Eugene Hill, Saco, Me.

Drainage in Abdominal and Pelvic Surgery, Joseph Price, Philadelphia.

Double Ovariotomy during Pregnancy; a Successful Case Going on to Full Term, William Warren Potter, Buffalo.

The Indications for Artificial Aid in Labor, Thomas Opie, Baltimore.

The Technique of Vaginal Hysterectomy, James H. Etheridge, Chicago.

The Surgical Treatment of the Perineum, William H. Wathen, Louisville.

Laparotomy in Peritonitis, E. E. Montgomery, Philadelphia.

Tumors of the Abdominal Wall, Charles A. L. Reed, Cincinnati.

Uterine Fibroids; their Diagnosis and Treatment, Thos. J. Maxwell, Keokuk.

Desmoid (Fibroid) Tumors of the Abdominal Walls, Edward J. Ill, Newark.

Ruptured Perineum, J. Henry Carstens, Detroit.

A Contribution to the Study of Pelvic Abscess, Clinton Cushing, San Francisco.

The Female Perineum; its Anatomy, Physiological Function, and Methods of Restoration after Injury. This paper will be illustrated with lime-light and screen. Henry O. Marcy, Boston.

Heart Failure in the Puerperium, Thomas Lothrop, Buffalo.

Treatment of Suppurative Peritonitis, William H. Myers, Fort Wayne.

Operative Treatment in Uterine Carcinoma, George R. Shepard, Hartford.

The Reflexes Reflected; or Some Things that Retard Progress in Gynecic Surgery, Joseph Eastman, Indianapolis.

Some Points in Relation to the Diagnosis of Pregnancy in the Early Months, James P. Boyd, Albany.

Vaginal Tamponnement in the Treatment of Prolapsed Ovaries, W. P. Manton, Detroit.

Mr. Lawson Tait, F.R.C.S.E., Birmingham, Eng., will

also present a paper on "The Methods of Success in Abdominal Surgery."

NOTE.—Mr. Lawson Tait, Dr. Franklin Townsend, Dr. E. E. Montgymery, Dr. Charles A. L. Reed, Dr. A. Vander Veer, and others will participate in the discussion on Extrauterine Pregnancy. The full announcement of the topics that each referee will speak to will be made in the final programme to be issued in August.

WILLIAM H. TAYLOR, M.D., President.
WILLIAM W. POTTER, M.D., Secretary.

SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.—*Preliminary Announcement of the Annual Meeting to be held at Birmingham, Alabama, September* 11, 12, 13, 1888.

Subjects: The President's Anuual Address, W. D. Haggard, Nashville, Tenn.

The Annual Oration, W. F. Hyer, Holly Springs, Miss.

Floating Kidney, with Vicarious Menstruation, DeSaussure Ford, Augusta, Ga.

Gastrostomy, W. B. Rogers, Memphis, Tenn.

The Medical Treatment of Fibroid Tumors of the Uterus, Bedford Brown, Alexandria, Va.

Indications for Operative Interference in Cerebral Troubles, T. O. Summers, Jacksonville, Fla.

A Case of Tubal Pregnancy, Presenting Interesting Medico-Legal Relations, E. P. Sale, Aberdeen, Miss.

Superinvolution of the Uterus following Trachelorraphy, Virgil O. Hardon, Atlanta, Ga.

1. Dermoid Cysts of the Coccygeal Region, and 2, Electrolysis in Gynecology and Surgery, E. J. Beall, Fort Worth, Texas.

Alexander's Operation, W. L. Nichol, Nashville, Tenn.

Hysterectomy in Cancer of the Uterus, W. H. Wathen, Louisville, Ky.

The Extravagancies and Impracticable Requirements of Modern Antiseptic Surgery, so far as the Country Practitioner is Concerned, J. M. Taylor, Corinth, Miss.

Treatment of Fractures with Plaster of Paris Splints, W. F. Westmoreland, Jr., Atlanta, Ga.

The Present Status of Electro-Therapeutics in Gynecology, J. R. Buist, Nashville, Tenn.

Antiseptics in Surgery and Gynecology, F. T. Merriwether, Asheville, N. C.

The Attitude of Removal of the Uterine Appendages for the Cure of the Convulsive Neuroses, W. Locke Chew, Birmingham, Ala.

Interesting Cases of Surgery, R. M. Cunningham, Pratt Mines, Ala.

My Antiseptic Bags, or Practical Aseptic Surgery, J. W. Long, Randleman, N. C.

The New Departure in Uterine Therapeutics—The Dry Method, T. A. Means, Montgomery, Ala.

A Study of the various Methods of Treatment of Laceration of the Perineum and Rectocele, with Report of Cases, J. H. Blanks, Meridian, Miss.

Report of a Case of Spinal Concussion, Jno. R. Page, Birmingham, Ala.

Fractures of the Forearm, Jno. Brownrigg, Columbus, Miss.

Some Practical Thoughts in Surgery, James Guild, Tuscaloosa, Ala.

Perineal Lacerations, M. C. Baldridge, Huntsville, Ala.

Electrolysis in the Treatment of Urethral Strictures, S. M. Hogan, Union Springs, Ala.

The Field and Limitation of Laparotomy, I. S. Stone, Lincoln, Va.

Operative Procedure in Hypertrophy of the Prostate, R. D. Webb, Birmingham, Ala.

Discussion. Abdominal Surgery.

Drs. Jno. Herbert Claiborne, Duncan Eve, Paul F. Eve, W. T. Briggs and others will present papers, but as yet have not stated their subjects.

NOTE.—The Association will convene in the hall of the Y. M. C. A., at 10 o'clock A.M. each day. The Annual Oration will be delivered at O'Brien's Opera House on the evening of the first day's session, at which time the Mendelssohn Club of Birmingham will give a concert for the entertainment of the Association. Entertainments have been arranged by the local committee to take up all the hours not occupied by the sessions. Hotels and railroads will give reduced rates, but only those holding certificates, signed by the ticket agent at point where through ticket to place of meeting was purchased, will be entitled to the two-thirds reduction in return fare.

W. D. HAGGARD, M.D., President.
WM. E. B. DAVIS, M.D., Secretary.

A TRIBUTE TO DR. GARNETT.—The following very appropriate remarks were made at the Medical Society of the District of Columbia on the death of Dr. A. Y. P. Garnett, by DR. JOHN B. HAMILTON:

A giant among medical workers has fallen; a dauntless soul has left our midst. A gentleman, without fear and without reproach; a physician with a spotless record; a practitioner most able; a consultant clever, courteous and conscientious; a scholar of high repute; a medical officer skilled in the exigencies of military and naval warfare; a man of the utmost energy; a devoted friend. All these attributes were possessed by our late colleague, the fact of whose future absence from our meetings falls on more than one here to-night as a personal loss.

Many of us had been accustomed to look for sympathy, support, and counsel to our departed colleague, whose wide knowledge of the world, great learning and vast experience made it a pleasure to be associated with him.

Dr. Garnett, leaving us at the age of 68, has left us the record of a life singularly complete in all that makes up a gentleman and high-class professional man.

Having graduated with honor, he entered the United States Navy, and in due course was promoted to the rank of Passed Assistant Surgeon. It was at this time that he made the voyage round Cape Horn and visited the Chilian coast. He wrote an interesting account of some cases observed in the service, which was published in the *Amer. Jour. of Med. Sciences.* He was ordered to Washington, and after marriage resigned and settled in the Capital.

He was engaged in active practice when the War of the Rebellion came. Who shall censure him now, that he followed the fortunes of his State, rather than those of the old flag? Dr. Garnett always acted true to his convictions of right, as the needle to the pole. Others might scold, sulk and backbite if they wished and remain under the protection of the flag while in enmity to its defenders, but not he. Business, property, peace and comfort were exchanged for the hardships of the camp, the battlefield and the retreat, because his convictions of the righteousness of the Southern cause forced him into the front.

Brave, honest, and true Dr. Garnett! No Northern soldier but honors his hatred of hypocrisy and his courage.

The war ended, his antagonisms died, and his practice was resumed with success, and the reward which none envied, and all approved.

He has lived as a gentleman and physician should live, and he has gone full of years, and covered with honors; but while our tears mingle with those of his immediate family, let us reflect with some satisfaction that we loved him while he lived, and honored him while he was yet in the flesh, and that he was spared the bitterness, so often accorded our great men, of meeting only envy, hatred and detraction during life. And so, while our colleague has passed beyond our ken to the realms of the unknown shore, the comforting thought comes to us that, while with us, he knew of our devotion and repaid us with his esteem.

THE CHAIR OF OPHTHALMOLOGY IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.—Dr. Herman Knapp has been appointed Professor of Diseases of the Eye in the College of Physicians and Surgeons, of New York. Dr. Knapp takes the chair occupied by the late Dr. C. R. Agnew.

Heretofore this chair, together with all the other chairs of clinical medicine, has been strictly clinical in character. Such is no longer the case with reference to the chair of ophthalmology. It has been made a didactic professorship, bears now the same dignity and entails the same emoluments as the chairs of theoretical instruction. This college is to be commended for this just step towards the recognition of specialism. This action will mark a distinctive era for specialism. It is to be hoped, and it is not improbable, that other medical institutions will follow in the steps of the College of Physicians and Surgeons.

The lamentable ignorance of eye diseases with which most graduates go into practice is a reflection upon their Alma Mater. Seeing that there is no compulsory attendance nor any examination necessary in the clinical courses of our medical colleges, the majority of students at least omit to avail themselves of the advantages which are open to them in these departments. However great a lover of knowledge a man may be, he will learn more under compulsion than when left to exercise his own free will; and however ardent a teacher a man may be, he will be more zealous in his pursuit if he feels that substantial and immediate reward awaits him for his work. In an editorial in the past we advocated this recognition of clinical instruction. We do not recognize any causal relationship between our plea and the above-mentioned occurrence, but it is grateful to see that we felt the pulses of some members of the profession with accuracy.

It is foreign to our purpose to discuss the question of specialism. Time has shown that it is inevitable; and since it is inevitable, it were best to place it as soon as possible upon a recognized and dignified footing.—*Gaillard's Medical Journal*, August, 1888.

BILLROTH ON MACKENZIE.—PROFESSOR BILLROTH, in a letter to a German daily paper recently said:

"With reference to your request for my opinion on Mackenzie, I can only reply that I have always warned people against passing a judgment on a man who, as a physician, occupies so difficult a position. I have never doubted the correctness of my Berlin colleagues, but I have also never been able to understand what political reasons made it necessary to communicate this diagnosis to the whole world. It cannot be admitted that Mackenzie with his vast experience has ever doubted the correctness of this diagnosis. If he behaved in such a way as to imply that he had some doubt as to the diagnosis, this could only be owing to pressure from above or from motives of humanity. I know such situations from my own experience; one is not inclined to disapprove the statement of one's *confrères*, but at the same time one is not inclined to tell the patient that his malady is incurable, for the known want of infallibility in medical diagnosis is almost the sole ray of hope to the unfortunate incurables. Falsehood in such cases becomes a moral act. The entire behavior of Mackenzie must, no doubt, be judged from this point of view. He did as a man and physician what was still possible to be done when the unfortunate word 'cancer' had already been pronounced. In much the same terms as these I have on different occasions expressed myself as to Mackenzie's conduct. I ask you to consider this as a private communication, at least until the sad catastrophe has occurred in Berlin."

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION will meet at St. Louis September 11, 12 and 13. The first day will be given to the discussion of abdominal surgery, the second to infant feeding and some obstetric subject. The third day will be taken up with volunteer papers and some neurological subject. The Society cordially invites all members of the profession to be present at the coming meeting. Arrangements are being made for special rates.

J. LUCIUS GRAY, Secretary.

70 Monroe St., Chicago.

DR. KARL KILCHER, Assistant in the Laboratory of Pathological Anatomy at Prague, died recently of blood-poisoning, contracted while investigating the blood of typhus fever patients.

DR. B. E. HADRA, late of Austin, Texas, has accepted the chair of surgery in the Texas Medical College, and has removed to Galveston.

Official List of Changes in the Stations and Duties of Officers Serving in the Medical Department U. S. Army, from August 4, 1888, *to August* 10, 1888.

Major Wm. D. Wolverton, Surgeon U. S. A., is relieved from duty at Washington Bks., D. C., and ordered to duty at Ft. D. A. Russell, Wyo. Par. 13, S. O. 173, A. G. O., July 27, 1888.

Major Wm. H. Gardner, Surgeon U. S. Army, is relieved from duty at Ft. McHenry, Md., and ordered to duty at Washington Bks., D. C. Par. 13, S. O. 173, A. G. O., July 27, 1888.

Major Daniel G. Caldwell, Surgeon U. S. Army, is relieved from duty at Ft. D. A. Russell, Wyo., and ordered to duty at Jefferson Bks., Mo. Par. 13, S. O. 173, A. G. O., July 27, 1888.

Major Ezra A. Koerper, Surgeon U. S. Army, relieved from duty at Ft. Keogh, Mont., and ordered to duty at Ft. Walla Walla, Washington Ter. Par. 5, S. O. 175, A. G. O., July 30, 1888.

Major Calvin DeWitt, Surgeon U. S. Army, relieved from duty at Ft. Sully, Dak., and ordered to duty at Ft. Missoula, Mont. Par. 5, S. O. 175, A. G. O., July 30, 1888.

Capt. Philip F. Harvey, Asst. Surgeon U. S. Army, relieved from duty as assistant to the attending surgeon at Washington, D. C., and ordered to duty at Ft. Keogh, Mont. Par. 5, S. O. 175, A. G. O., July 30, 1888.

Capt. Charles B. Byrne, Asst. Surgeon U. S. Army, is relieved from duty at Washington Bks., D. C., and ordered to duty at Ft. McHenry, Md. Par 13, S. O. 173, A. G. O., July 27, 1888.

Capt. Wm. C. Gorgas, Asst. Surgeon U. S. Army, granted leave of absence for one month, to take effect on being relieved from duty at Ft. Randall, Dak. Par. 4, S. O. 177, A. G. O., August 1, 1888.

First Lieut. Charles B. Ewing, Asst. Surgeon U. S. A., relieved from duty at Ft. Lewis, Col., and ordered to duty at Washington Bks., D. C. Par. 13, S. O. 173, A. G. O., July 27, 1888.

Official List of Changes in the Medical Corps of the U. S. Navy for the Week Ending August 4, 1888.

Medical Inspector A. Hudson, detached from the "Trenton" and ordered home.

Surgeon C. H. White, ordered to the "Trenton" via Panama.

Asst. Surgeon John F. Uric, ordered to the receiving ship "Franklin."

Medical Inspector N. L. Bates, detached from the "Richmond" and to the "Pensacola."

P. A. Surgeon Frank Anderson, detached from the "Richmond" and to the "Pensacola."

Asst. Surgeon Isaac W. Kite, detached from the "Richmond" and to the "Pensacola."

Surgeon W. H. Jones, detached from the "Pensacola" and to the "Richmond."

Asst. Surgeon E. P. Stone, detached from the "Pensacola" and to the "Richmond."

Asst. Surgeon A. M. D. McCormick, ordered to special duty in the Bureau Med. and Surg.

Asst. Surgeon F. W. F. Wieber reports arrival home, having been detached from "Vandalia."

AUTHOR'S NAME WANTED.—We have on hand a paper on "The Antipyretic and the Abortive Treatment of Typhoid and Remittent Fevers," written on 56 pages of note paper. There is no name nor date nor address on any part of the mss. The author will oblige us by sending his name and address.